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Chapter V HEALTH AND HEALING IN INDONESIA

5.1 Traditional Medicine

Ethnomedicine has been in use for thousands of years – with major contributions being added along the way by indigenous healers who employ plant, animal and mineral-based remedies and spiritual practices – and today has become of particular importance for health providers of Primary Health Care (PHC) at the community level. WHO explains that Traditional Medicine refers to health practices, approaches, knowledge and beliefs incorporating manual techniques and practices, applied alone or in combination, to prevent and diagnose disease, treat illness and maintain physical and spiritual well-being. Traditional (indigenous or folk) medicine describes medical knowledge systems, which have developed over centuries within various societies before the era of cosmopolitan biomedicine. The concept 'folk medicine' was taken up by medical anthropologists to differentiate 'magical practices'. Using these concepts, medical systems could be considered the specific product of an ethnicity's cultural history. Micozzi (2006: 11) states that: "With medical traditions that have been encoded and carried as knowledge in different cultures for many years, it is possible to study the adaptiveness and adaptive value of such practices".

Young (1983) explains some aspects of Traditional Medicine in the following ways: medical traditions are distinctive mixtures of ideas, practices, skills, equipment and *materia medica*; a medical system is equivalent to the social and economic order in which one or more medical traditions are used to produce and distribute health services and outcomes in a particular community or region; a plural medical system is one which incorporates more than a single medical tradition; and, a medical sector refers to the segment of a medical system which is dominated by a particular medical tradition.

5.1.1 History of Traditional Medicine

Traditional Medicine refers to ancient culture-related medical practices which existed in human societies before the application of modern science to human health care. The practice of Traditional Medicine varies widely in keeping with the societal and cultural heritage of a specific community. Each society has its own narrative to tell about its particular remedies and practices which coalesce over time into a collective medical system. Members of a community can find themselves in a situation where they can subscribe to a wide range of therapies, practices, explanations, knowledge and belief constructs. Foster (1983: 17) points out that: "... it is of primary importance to the members of every group to try to maintain their health and to restore to health those who fall ill". Moreover, he adds that every human community has developed its own medical system: i.e. "the pattern of social institutions and cultural traditions that evolves from deliberate behaviour to enhance health". Micozzi (2006: 11) tells us, as did Frazer, that historically: "At the end of nineteenth century, European interpretations regarded traditional medical

practices as myth, superstition, or magic (and sometimes madness)". In 1920, social scientists began describing the meaning of traditional medical practices: "... if traditional societies, through plant domestication and agriculture learn to obtain nutrients (foods) from the environment in which they live, they may also learn to obtain medicines from their environments and to develop therapeutic techniques to provide medical care" (Micozzi 2006: 11). According to Foster (1983: 18–19) the causality concepts of Traditional Medicine in ethnomedical accounts described as 'magical' or 'supernatural' include the following:

- (1) angry deities who punish wrongdoers, for example, those who violate taboos;
- (2) ancestors and other ghosts who feel they have been too soon forgotten or otherwise not recognized;
- (3) sorcerers and witches, working for hire or personal reasons;
- (4) loss of the soul, following a bad fright that jars it loose from the body or as the consequence of the work of a sorcerer or supernatural spirit;
- (5) spirit possession or the intrusion of an object into the body;
- (6) loss of the basic body equilibrium, usually because of the entry of excessive heat or cold into the body;
- (7) the evil eye.

This category is called 'personalistic', in that assault is directed against a single person as the result of the will power of a human or supernatural agent or creature. The antithesis of 'personalistic' is 'naturalistic', where disease and illness are explained in impersonal, systemic terms. For example, the intrusion of heat and cold or their loss from the body upsets its basic equilibrium, such as: 'yin' and 'yang' in Chinese medicine. In additional, Foster (1983: 19) states that: "Personalistic explanations appear to predominate (although not to the exclusion of naturalistic explanations) in the traditional systems of such vast areas as Africa, preconquest America, Oceania and indigenous Siberia. They also underlie the more complex systems of contemporary China, South Asia, and Latin America". In contrast, naturalistic explanations predominate in humeral pathology, Ayurveda, Unani, and traditional Chinese medicine. The classification system of illness is very much dependent on the classifier or the community itself. The community does not choose between the systems but creates and maintains different medical systems based on their knowledge gained through experience. A community's conceptualisation of health and healing is not restricted to a single system only; it has developed local theories about disease and categorisations which affect health and healing practices and illness behaviour.

Health care in a society is characterised by a plural medical system which stresses the interaction between behaviour and socio-cultural structure and places the system in its historical and geographical context, thereby encapsulating the dynamics inherent in a medical system (Dunn 1976). Such medical systems which are part of a community or ethnicity, studied as ethnomedicine, have come to mean the health maintenance system of any society. Health ethnographies encompass beliefs, knowledge, and values in relation to health and healing systems within a community. It also includes the roles of healers, patients or clients, and family members and techniques such as the use of herbal medicine, specialists, symbolic and interpersonal components of the experience of illness.

In Traditional Medicine, knowledge, beliefs and practices regarding illness and how to heal the sick form a complex study in human behaviour, and their inter-relationship makes it possible to assess the rather complicated utilisation of medicinal plants and the need to cure illness through trial and error. The complex of knowledge, beliefs, and practices is incorporated in the Ethnobotanical Knowledge Systems (EKS) as part of Traditional Medicine in a specific community. Ethnobotanical Knowledge Systems focus on the botanical knowledge of local communities framed in their own emic classifications according to cultural principles, specifically plants used as herbal home remedies by community members for health and healing purposes. As mentioned in Chapter I, Slikkerveer (2006) points out that the study of interactions between people and plants involve contributions from botany, ethnopharmacology and anthropology, as well as from ecology, economics and linguistics. Such multidisciplinary approaches developed different methodologies and analyse indigenous phenomena in a particular culture or community in a cross-cultural way. In addition, Bodeker (1997) discusses that traditional medical knowledge includes both sacred and empirical concepts, frameworks for understanding health and healing, assumptions about the cosmos and causality, and taxonomies which address a perceived order in nature. Traditional medical systems extend to and appreciate both material and non-material properties of plants, animals and minerals. The term 'systems' is used to reflect the organized pattern of thought and practice which builds and maintains the body of knowledge in Traditional Medicine.

Traditional Medicine covers a wide variety of therapies and practices which differ from country to country and region to region. In some countries, such remedies are referred to as 'alternative' (*cf.* Geertz's 1960: 86) listing of specialized indigenous healers or *dukuns*¹ in Section 1.3.3 (Traditional Medicine).

Those knowledge, beliefs and practices relating to diseases which are the products of indigenous cultural development are not explicitly derived from the conceptual framework of modern medicine. The inspiring culture of the ancient times had a rich collection of medicine, some elements of which, with the development of modern medicine, declined while others were preserved and handed down to future generations. A few elements were further developed and spread far and wide. Traditional Medicine has made a great contribution to the welfare of all peoples around the world.

5.1.2 Use of Herbal Medicine (*Jamu*)

Medicinal plants and herbs have always played a major role globally in the development of medicine and public health, especially in developing countries. Around the world diverse plants, both wild and cultivated, are being used for various purposes (Amar 2010: 54). Medicinal Aromatic Cosmetic (MAC) plants belong to the category of plants most promising in health care, the properties of which make them suitable for either promoting better health or preventing disease and treating illness. Many MAC plants also have nutritional value. Importantly, plants used to prevent disease or improve health are more likely to be used on a long-term basis because, from a philosophical point of view, their usage implies that one is striving to lead a healthy way of life. One should note that the distinction between both categories of plants is not always obvious nor perhaps do people even take such differences into account when using them (Amar 2010: 54). Because many

MAC and nutritional plants can be used simultaneously for health purposes, Slikkerveer (2003) states, that they are regarded as being the most important link to human health. Moreover, plants are also used in life-cycle rituals in which they symbolise the hopes and dreams of the people who are applying them to obtain positive results.

Looking more closely at *jamu*, significant medicinal components can be observed which are obtained from the leaves, roots, bark, flowers and stems of higher plants³ as well as from the minerals and fungi usually found in tropical forests. *Jamu* is largely produced in the form of pills, powders, tea, tonics, topical oils and ointments. Remedies, usually made up of three or more ingredients, are used to treat almost every kind of disease as well as to manage conditions such as infertility and even depression. *Jamu* is very popular for maintaining general good health and for the benefit of one's appearance.

Obviously, traditional herbal remedies play an important role in the health care of millions of people in developing countries. For instance, Gollin (1993) states that approximately 80% of Indonesians, from all socio-economic levels and ethnicities, daily take some form of *jamu* which are available in pharmacies, department stores, street stalls as well as from *jamu gendong* vendors. Moreover, many people concoct their own homemade *jamu* from medicinal plants cultivated in home gardens.

As early as 1775, the botanist Rumphius studied herbal medicine (jamu) in Indonesia and published a book about it entitled Herbaria Amboinesis. Another scientific study on jamu was also carried out by a researcher at the Centre for Herbal Medicine in Bogor Botanical Gardens. The first seminar on jamu was held in Solo in 1940, followed by the establishment of Indonesia's Jamu Committee in 1944. Each ethnicity in Indonesia has its own recipes, preference for ingredients (e.g. leaves, stalk, bark, roots, rhizomes, fruit and flowers) and application in Traditional Medicine. Herbal preparations vary, depending on the user's needs. Afdhal & Welsch (1991: 149) state that: "... some herbal medicines have long been part of the public domain, that is, general knowledge in their respective communities. Others, particularly more elaborate mixtures and concoctions have traditionally been regarded as privately own knowledge, secret heirlooms passed on by the families of dukun's, the royal courts and nobility, or by ordinary citizens". Traditional Indonesian societies probably tended to admit jamu as one branch of healing. The recipes for such Traditional medicines, derived from MAC plants, have been passed down through generations from early ancestors and are local remedies obtained directly from natural materials available in Indonesia, processed in a simple manner based on experience. Tilaar (1985: 1) states that some jamu: "... emphasize the traditional medical philosophy of Javanese or Indonesian health care". In addition, Soedibyo (1984) states that: "... jamu is the mysterious secrets of the royal courts of Central Java". Because jamu is made from the above-mentioned natural components, it often has a bitter taste, thus making it necessary to add honey and/or lemon before consumption.

Slikkerveer (2003) describes the role which Traditional Medicine has come to play in the provision of integrated health care to the community: "Particularly in developing countries where limited resources continue to hamper the equal distribution of scarce modern health care, the potential of less costly and locally available alternative forms of widely used indigenous medical knowledge and practices to contribute to Primary Health Care delivery is now recognized". Niehof (1991: 237), when speaking about Madurese folk medicine, says that: "For a person afflicted with illness or misfortune, there are several

options open in order to regain the state of balance. Home remedies are the first alternative to turn to, unless there is acute danger which calls for more drastic action. Home remedies include herbal drinks, ointments, purgatives, fumigation, bathing, massaging, cupping, and the like. Sometimes it is sufficient to follow dietary restriction".



Figure 5.1 Woman selling *Jamu Gendong* door to door. (Source: Field Study 2009)

The preparation of *jamu*, perhaps unknown by many Indonesians although they like consuming it, is the responsibility and specialisation of certain people: *e.g.* indigenous healers, door-to-door *jamu gendong* vendors² and manufacturers of industrial *jamu* in bulk. *Jamu* is made from a mixture of ingredients or herbals, pulverized, boiled and reduced to form a concoction (*ramuan*). The herbal nature of *jamu* appears to be closely related to the liquid remedies sold by door-to-door vendors, specific trademark products sold by street merchants, and home-made concoctions made by indigenous healers such as *paraji* (TBA). There are thousands of *jamu* sellers roaming Indonesia from door to door selling a glass full of freshly made herbal medicine. *Jamu* vendors also offer ready-made concoctions produced by specialised *jamu* manufacturers.

Today, one can easily purchase *jamu* packaged as powder, pills, capsules, tonics, oil and ointments. *Jamu* is claimed to be beneficial in treating a wide variety of ailments, from fatigue and headache to HIV/AIDS. It also strengthens the body and helps keep it in good shape, cleanses the blood, helps avoid *masuk angin* (not feeling well) and makes the skin smooth and gives it a fairer complexion. *Jamu* consumers come from every level of society, from rural villages to large cities. Not all Indonesians like to consume *jamu* because of its bitter taste but, because it is readily available and comparatively inexpensive compared to pharmaceuticals and industrial products, *jamu* is more frequently sought out by the public.

Jamu is usually consumed in liquid form but can also be applied topically as ointment on the skin or forehead. Traditional techniques for preparing jamu entail cutting, grinding and boiling. Popular traditional tools are the clay pot and grater still found in many households. Slikkerveer & Slikkerveer (1995) explain that Tanaman Obat Keluarga³ (TOGA), as part of the National Family Welfare Programme, encourages each neighbourhood to plant a garden for growing medicinal plants to supply to residents who are in need of treatment. Maintaining a garden also helps keep alive and pass down to younger generations' invaluable traditions as part of ethnobotanical knowledge systems (EKS). Among the common herbs used in jamu prescriptions are: jahe (ginger – Zingiber officinale), asem Jawa (turmeric – Curcuma domestica), kumis kucing (Orthosiphon aristatus), bengle (panglay – Zingiber bevifalium), kayu secang (Caesalpinia sappan hinn), brotowali (Tiospora rumpii boerl), kayu manis (cinnamon – Gijeyzahyza glabra), and alang-alang (Gramineae).

According to Hargono (2008), the history of jamu began long ago in Indonesia when ancestors used plants for nutrition and their curative properties. The oldest historical document dates from 772, i.e. a carved relief about medicine at the Borobudur temple. Carvings have also been found in Prambanan, Panataran, and Tegalwangi temples. In 991– 1016, recipes for medicinal preparations using plant extracts were written on Tal (palm) leaves, called Lontar Usada in Bali. In South Sulawesi, written recipes called Lontarak Pabbura have also been unearthed. In Java, recipes were written on Rontal (Ron: leaves). Several documents have been translated into Indonesian and other foreign languages, such as the translation of Lontar Usada in Dr. Wolfgang Weck's book entitled Heilkunde und Wolkstum auf Bali (Medical Science and Behaviour in Bali). Before World War II, Dr. R. Goris frequently wrote about Balinese medicine for journals published in both Indonesia and other foreign countries. Before Indonesia gained her independence, the Dutchmen Kloppenburg and Wijk gathered data about medicinal plants and published their findings in several books, e.g. two entitled Indische Planten en Haar Geneeskraacht (Indonesian Plants and Their Medicinal Powers) and Martha's Indische Kruiden Recepten Boek (Martha's Indonesian Herbal Receipt Book). In addition, Hargono (2008) tells us that, in the era of Indonesian Kingdoms, e.g. at the Surakarta Royal Palace, in 1858 knowledge about natural medicinal preparations was documented and published in Kawruh Bab Jampi Jawi (Knowledge of Javanese Herbs). It describes the usage of 1734 herbs. At that time, plants were collected from the wild in the vicinity of people's living quarters. As medicinal plants became over-harvested and more difficult to find, people were forced to search farther afield, e.g. in forests. Because plants differ in quality, the idea arose to begin cultivating such plants in gardens.

In 1942–1945, during the Japanese occupation of Indonesia, the population's health suffered greatly due to undernourishment, because the Japanese Military Government was concerned exclusively with waging war and confiscated many resources and privately owned supplies and local products for their own use. Together with the shortage of materials for their basic needs, medicines were also unavailable for the Indonesians. At this time, traditional *jamu* was the only alternative medicine available to the public. Sastroamidjojo (1967: 1–20) states that: "While recognizing the need for jamu to treat serious illnesses such as malaria, dysentery, tuberculosis and pneumonia, few physicians had more than a vague idea of which plants to use, in what proportions they should be

mixed with other ingredients, or in what doses they should be prescribed. Even for less serious conditions, such as scabies, worms, septic sores and fever, few of these doctors who were born and raised in Indonesia could confidently prescribe medications made from indigenous plants because of their limited experience and information".

The Japanese occupation of Indonesia created a shortage in, among other things, pharmaceuticals; when Indonesian doctors were forced to find substitutes, they turned to *jamu* recipes obtained from a number of sources. The Japanese authorities, urging that research on *jamu* be coordinated, completed lists of dosages and usages, the findings of which were published in the magazine *Asia Raya*. In short, the Japanese occupation and Indonesia Revolution (1945–1949) were simultaneously associated with dynamic attitudes and practices in the Indonesian medical community towards herbal medicines. However, after independence when imported pharmaceuticals became available, Indonesian physicians abandoned *jamu* in favour of modern medicine.

5.2 Modern Medicine

5.2.1 Introduction of Western Medicine

During the 350-year Dutch Colonial Rule in the Indonesian Archipelago, Western therapies were increasingly circulated throughout the islands by way of the Dutch East India Company (VOC), trading between The Netherlands and the East Indies. In 1804 smallpox was widespread in the Archipelago; therefore, the Dutch Government provided preventive health services for the public by introducing smallpox vaccination programmes. Hydrick (1942: 1) mentions that a public health service (Dienst voor de Volksgezondheid) was established in 1925 to improve general public health. Koesoebjono (1993) points out that, before 1925, only Dutch and European communities in Indonesia were provided with health care. While they were allowed to use military hospitals in 79 towns, the local Indonesians had to rely on care provided by public hospitals and small clinics set up in only a few towns. Data provided by Indonesia's National Health Department (Departemen Kesehatan Republik Indonesia 1978) show that, until 1880, the few hospitals available to the general public were located in Batavia, Semarang, Surabaya, Bandung and several other towns, as well as polyclinics for ambulatory treatment (only for out-patient care). Not all clinics were in use, however, because a permit to continue services was only granted if the clinic achieved a minimum of five daily visits. Koesoebjono (1993) furthermore states that, during the Dutch Colonial Era, the development of health care was influenced by three main factors: (1) the Dutch Government's policy, (2) health/medical science with its innovations and changing philosophy, and (3) increasing demands from native Indonesians, especially from local medical doctors who had graduated from medical schools in Java. Improvements in drainage, sanitation and the sewer system became and continue to be the foundation for the health infrastructure.

In coping with public health problems, during the Dutch Colonial Era health care was still imperfectly organized. Usually officials would procrastinate until some health concern became a full-blown issue, forcing the authorities to focus all their attention on the infection itself, while showing little concern for the public health conditions in Dutch East

Indies. Schoute (1937: 4) explains that: "They were allowed, unlike surgeons in the Netherlands, to treat diseases. The company charged them 'with the execution of the art of healing in its full compass ... both on board and on shore in India". In addition, Sciortino (1995: 56) points out: "Their primary concern was the health of the crew, and local people were only marginally and indirectly confronted with their activities".

Sigerist (1990) indicates that, during the Dutch Colonial Era, modern medicine was not being introduced into a vacuum in the non-Western world. Long before the arrival of modern medicine, all human societies had developed their own methods for fighting disease, usually referred to as 'traditional'. Today, the majority of rural Third World populations still depend on Traditional Medicine. The introduction of modern medicine by colonial powers only benefitted the European colonists and a few local elite but did not improve the health of local populations. Voorhoeve (1966: 77) states that: "Simultaneously, a vivid interest awoke in tropical countries, partly as a result of the liberal mercantilism. Western physicians started teaching their newly acquired medical science in Asiatic countries, e.g. in Indonesia in 1851, in Thailand in 1889. They found a favorable response among the well educated sons and daughters of the most advanced and well-to-do classes, the elite of the indigenous population".

Slikkerveer (1982: 7) also tells us that: "Post 1945, the European countries developed complex systems of health care planning and services. During the process of decolonization in the fifties and sixties it became clear that in developing countries the health care services were not accessible to all. It was impossible to maintain the expensive health care system of the colonial powers. Only the rich urban elite groups could afford modern health care facilities; the vast majority of the rural population was not or hardly able to use it". Bushkens (1982: 74) adds that: "One of the great mistakes of the post-war era decolonization was the Third World's haste to imitate the welfare-state models of the former colonial powers without the support of a solid industrial basis. In the health sector most developing countries mistakenly opted for large centralized hospitals, costly drugs and sophisticated technologies".

Biomedical health-care systems are closely linked to national policies pursued by the Central Government through the National Minister of Health who is the largest provider of integrated medical services which include general and basic health services and special programmes. Here 'general health services' refers to the network of general and specialised hospitals, health centres, and health stations. 'Basic health services' comprise a network of health centres and health stations at the community level. In the provinces, *Dinas Kesehatan Propinsi* (Provincial Health Departments) is the key administrative and technical units for the regions concerned. These departments are each responsible for planning, implementing and administrating the regional health services, under the auspices of the health policy laid down by the National Ministry of Health. The Provincial Medical Officer for Health (*Kepala Dinas Kesehatan Propinsi*) is assisted by staff usually numbering one or more health officers, public health nurses and sanitarians, pharmacists, and laboratory technicians.

5.2.2 Health-Care Services after Indonesia's Independence

Indonesia's health-care system has developed significantly over the past three decades. Koesoebjono (1993: 12–13) states that: "As the world's archipelago, Indonesia is challenged by many health problems related to poor education, misinformation, and underutilisation of health services, which all contribute to the predominant health issues of inadequate environmental sanitation, unsafe water supplies, and population control". In addition, she points out that, for a better understanding of the dynamics of health-care services in Indonesia, history should be studied from the Dutch Colonial Era up to the present time.

In 1926 a Division of Health Education was established, after the Rockefeller Foundation persuaded the Dutch Government that an educational approach was appropriate for Indonesian at that time. Koesoebjono (1993:14) states that: "... the task of the health educators, who were called 'propagandists', was to make people aware of prevailing health problems. The methods used for this propaganda were the distribution of posters, printing media and film shows on health and hygiene, as well as demonstrations and visits people's homes". Data provided by the Departemen Kesehatan Republik Indonesia (1978) show that, in 1932, education on hygiene broadened its scope to include quarantine, preventive health care and training of paraji (TBA) in order to reduce Infant Mortality Rates (IMR). Communities were made more aware of health issues through, e.g. training courses for school teachers and members of women's club. It is undeniable that the Dutch laid the foundation for modern health care in Indonesia.

Furthermore, Departemen Kesehatan Republik Indonesia (1978) records show that, from 1942 to 1945 during the Japanese occupation, health-care services had worsened substantially because of a lack of medical supplies and health facilities, most of which were confiscated for Japanese military use only. Public health deteriorated even further as a result of serious malnourishment. The Indonesians were forced to hand over 50% of their harvest to the Japanese military, although the Japanese never swapped food for clothing or health provisions. The mortality rate was very high, and many people suffered from oedema, particularly the romusha, i.e. the forced-labour road construction crews and plantation workers, all who laboured under the strict supervision of the Japanese Military Government. Supplies of imported goods, including clothing, pharmaceuticals, livestock, rice and other foodstuffs as well as personal possessions were confiscated by the Japanese Military Government, its officers and soldiers, without compensation. When the Japanese occupation ended, most Indonesians faced incredible shortages of food and other basic necessities. In short, for most Indonesians, the Japanese occupation was a period of hunger, sickness and want. Lack of medicines and health care led to the use of local herbal medicines or *jamu* to fulfil the need for medicine.

Ferzacca (2002) points out that, after independence in 1945, the development of health services gradually increased and health care became available for all Indonesians; however, medical doctors once again put *jamu* on the back shelf as they returned to the use of pharmaceuticals which they had studied at medical school. The struggle to modernise and become economically developed without becoming Western is an issue for medical pluralism in Indonesia. Additionally, Ferzacca (2002: 35–36) says that: "Medical Pluralism for Suharto's New Order regime in Indonesia was a crucial element for a political

organization based upon an ideology and pragmatics of development (pembangunan)". Foucault (1991) states that, regarding the development of health as well as science during the Dutch Colonial Era, the Indonesian population can be defined and managed as a "collective mass of phenomena" particularly in demographic terms of health and disease for target of intervention. With the Suharto regime (1966–1998), bio-medicine became an important means for development and nation building. Ferzacca (2002: 36) argues that: "Scientific medicine becomes a significant feature of postcolonial forms of governmentality because of its technological, qualifying, and practical relations with many of the demographic measures that define the economy and health of a population. These measures, for example, rates of fertility, infant mortality, life expectancy, disease prevalence, among others, not only make up a population's profile, but are also the targets as well as the efficacious indices of the presence or lack thereof development".

As Minister of Health during Soekarno's era, Leimena considered basic health care in its preliminary stage, recognized as the Bandung Plan (1951), as an historical concept adopted by WHO and redefined as Primary Health Care (PHC) through development of health service units as a functional organisation under the Sub-District Health Centres named *Puskesmas* (Community Health Centre) in 1969/1970. During Soeharto's rule, the development of community health was merged into the programme between 1969 and 1974. Then in 1990 *Puskesmas* were transformed into a functional health organisation which empowered communities to play a role. As district health organisation, *Puskesmas* have several functions: (1) the Regional Health Centre should provide for and manage local community health, supervise and prevent infectious diseases in the community, improve and sustain a healthy environment, and supervise public places; (2) it should provide and help sustain holistic, completely integrated medical services and care to the community at large, such as general medical treatment, dentistry, Maternal and Child Health (MCH) services, Family Planning, and information about nutrition and health management.

Java is the most density populated island in Indonesia accounting for ca. 59% of the country's total population. The imbalance in population distribution is caused by a total accumulation of policies to centralize all types of facilities on Java Island, such as: central government offices, universities, industry, tourism, and other services which have been established in Java. About 80% of the population lives in rural areas which presents specific dilemmas, one of which is the problem of health care. Public health – in both rural and urban areas – is insufficient for the entire population and still needs to be improved. This problem can be illustrated by the failure of many health programmes implemented one after the other. Future health programmes must focus more attention on reproductive health and MCH services.

The high Maternal (MMR) and Infant (IMR) Mortality Rates is one of the most important health issues in Indonesia where three conditions pose an obstacle in reaching the goals proposed in the Health Index. First, regarding a healthy environment, there is a general lack of awareness about hygiene and healthy lifestyles (*perilaku hidup bersih dan sehat*). Many diseases which are result from an unclean environment are on the increase, such as avian and swine influenza, dengue fever, malaria, tuberculosis, etc. In 2007, West Java surpassed the status of Papua when its rate of HIV/AIDS became the second highest in Indonesia. Second, the accessibility and quality of health care are important issues. Primary Health Care (PHC) still fails to meet the minimum standards. Basic health services are not

fully accessed, mostly by the poor, because doctors and health providers are not located equally across rural areas. In West Java, only 43.23% of the *bidan* (CMW) are posted in rural areas. Third, another obstacle is the sum total condition resulting from poverty. Government programmes assure the poor that they will receive health insurance (*asuransi kesehatan bagi masyarakat miskin* – ASKESKIN) for which the daily insurance premium is Rp 5.000 per person. Delayed payment by the Government to hospitals is causing bankruptcy. Empowerment is also an important means to stimulate improved health conditions, first by encouraging access and health services for the poor.

5.3 Primary Health-Care Development

5.3.1 Alma-Ata Declaration of 1978

The Alma-Ata Declaration (1978) proposed a Primary Health Care (PHC) model based on the need for comprehensive health-care strategies to cope with social, economic and political conditions and to develop and provide health services for all peoples around the world. The declaration adopted the 'Global Strategy for Health for All by the Year 2000' defined by WHO (1998: 2) as: "the attainment by all the people of the world of a level of health that will permit them to lead a socially and economically productive life". The Declaration of Alma Ata was clear about the values pursued: social justice and the right to better health for all, participation and solidarity. It implied that progress towards these values required fundamental changes in the way health-care systems are organized and relate to the potential of other sectors (cf. Appendix I).

The 'Global Strategy for Health for All' represents the formal beginnings of the social model of health with Primary Health Care as its means. Primary Health Care is defined in the declaration of Alma Ata (1978) as: "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's medical system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national medical system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process".

Primary Health Care, initiated by the Alma-Ata Declaration, is the foundation within medical systems catering to the basic needs of the world's population. Furthermore, Primary Health Care is "presented as a philosophy of health work as part of the 'overall social and economic development of the community" (WHO 2005: 11). More than 30 years after the introduction of Primary Health Care, it becomes clear that expectations and broad support for Alma Ata's values have not always been easily translated and developed into actual medical systems, due to the oversimplified operational of the PHC movement, at national and global levels, by health authorities. Most policies see Primary Health Care not

as a set of reforms, as originally proposed, but rather as one health-care delivery programme among many, providing poor care for poor people (*cf.* WHO 2008).

"The Primary Health Care values to achieve health for all require medical systems that 'Put people at the centre of health care'. What people consider desirable ways of living as individuals and what they expect for their societies – i.e. what people value – constitute important parameters for governing the health sector" (WHO 2008: 12). Primary Health Care has remained the central focus for every country's debate on health issues because the PHC movement has attempted to provide rational, evidence-based and anticipatory responses to health needs and to social expectations. Achieving this requires trade-offs which must start by taking into account public "expectations about health and health care" and by ensuring that "the community voice and choice decisively influence the way in which health services are designed and operate" (WHO 2008: 12).

Primary Health Care should be effective for both individuals as well as communities. Effective means all of the following:

- (a) care which is accessible and equitable for all individuals and communities;
- (b) community participation where individuals and communities actively participate in taking decisions which affect health;
- (c) health promotion remembering that health care encompasses more than just physical and mental health, taking into account social, economic, environmental and spiritual factors;
- (d) appropriate skills and technology health care using appropriate technology based on a community's health needs; and
- (e) inter-sectoral cooperation working with other relevant sectors which influence the health of communities and individuals.

5.3.2 Primary Health Care in Indonesia

Prior to the Declaration of Alma Ata in 1978, regarding Primary Health Care (PHC), Indonesia had developed various forms of basic health care in several regions. In 1976, in about 200 communities, Community-Based Health Activities (CBHA) were being implemented. Since then, Primary Health Care has developed rapidly as expressed by various forms of Community-Based Health Activities (CBHA), one of which is the *Posyandu* (Integrated Service Post). This activity covers five major programmes, *i.e.* Maternal and Child Health (MCH), improvement of nutrition, immunisation, family planning, and prevention of diarrhoea. In addition to the *Posyandu*, *Polindes* (*Pondok Bersalin Desa*) or birthing huts and village maternity homes are managed by *bidan* (CMW) in collaboration with *paraji* (TBA) as a way to bring MCH services into the community. However, the CBHA Programme went into decline during the 1997–1998 monetary crisis, which resulted in a multifaceted crisis requiring a total reform of many aspects of life, including the health sector.

Indonesia's move from centralisation to a policy of decentralisation overwhelms most aspects of development, including the health sector, and has totally changed how systems develop. Its implications are felt when trying to set priorities in each district. Many local

governments are more concerned about taking curative rather than promotive and preventive measures. Subsequently, the Indonesian Ministry of Health has to revive and reformulate its central priority for Primary Health Care: (i) to activate and empower communities for a healthy life; (ii) to improve the public accessibility to good quality health services; (iii) to improve systems of evaluation, monitoring, and health information; and (iv) to increase health financing. The strategies (i) and (ii) are mostly related to Primary Health Care, indicating the important role it plays in the development of health care in Indonesia (*Departemen Kesehatan Republik Indonesia* 2007). The implementation of Primary Health Care in Indonesia is mainly through *Puskesmas* (Community Health Centres) and organisations under its authority such as: mobile health centres and many types of Community-Based Health Activities such as *Polindes* (village maternity home) and health posts at the village level; *Posyandu* (Integrated Services Post) at the sub-village level.

Since launching the 'Safe Motherhood Initiative' (SMI) in 1987, considerable efforts have been exerted to reduce the Maternal Mortality Rate in Indonesia. The National Health Ministry has become more responsive to the coverage of maternal health and has improved and increased the flow of information to help reduce maternal morbidity and mortality. In the future, the Ministry of Health will have to develop effective and affordable programmes to achieve reduction of the Maternal Mortality Rate. The Indonesian Ministry of Health is committed to improving maternal health services; primarily by enhancing the number of skilled birth attendants either at health-centre facilities or at home.

Human reproduction is a human right. Consequently, every individual has the right to safe and healthy reproduction. In 1994, the International Conference in Population and Development (ICPD) in Cairo defined the reproductive process as follows:

- (1) Every sexual activity should not be under compulsion and be safe from infection;
- (2) Every pregnancy should be planned; and
- (3) Every delivery should be healthy and safe for mother and baby.

Maternal and infant mortality, as well as maternal morbidity, resulting from inadequate antenatal, perinatal and/or post-partum care still remain a major problem in Indonesia. In poor countries, ca. 25–50% of women's deaths at a reproductive age can be attributed to complications during pregnancy, labour and delivery. Death during childbirth is the greatest obstacle for women during stages of reproduction. WHO (2003) estimates that every year more than 585.000 women die during pregnancy or childbirth worldwide. More than 50% of the deaths can be avoided by using available low-cost health technologies, such as: changing a community's perception towards skilled birth attendants (*bidan*) for maternal health services. Based on actual conditions, the Ministry of Health implemented its policies by developing ongoing programmes to alter public behaviour and make people more aware of the possibility of high-risk pregnancy and childbirth, especially in rural areas

Historically, in Indonesia, to reduce the maternal and neo-natal death levels, in 1952 under the auspices of WHO and UNICEF a programme called *Balai Kesejahteraan Ibu dan Anak* (BKIA: 'Bureau for Mother and Child Welfare') was set up in each Indonesian

province. The BKIA Programme included formal training for midwives and paramedics to provide better care for mothers during pregnancy, labour and delivery and to promote special care for infants and children. The BKIA Programme also provided health education for women, vaccinations and simple services which a medic could carry out.

An attempt to integrate traditional and modern Maternal and Child Health (MCH) in Indonesia began before the country gained its independence, which occasionally becomes obvious in the chronological listing of MCH programmes. Norms regarding traditional knowledge and practices are in contrast with the ethos of modern science, rendering problematic the integration of both traditional and modern systems at different levels. It is clear that, epistemologically, the option to integrate is still largely constrained by the cognitive heterogeneity among different medical systems, despite recent attempts to adapt and transform the underlying local and global knowledge systems (Slikkerveer 2003). Hydrick (1942: 53) notes that, in 1937, training of paraji (TBA) began in Purwokerto. "The Health Service plan is to supply more and more well-trained midwives who will go to rural areas and take up private practice. To help the people temporarily and to bridge this period, the Services use these hygiene-centres and the services of the midwives who are in charge of the centers to teach doekoens the elements of hygiene". In 1950, the 'Organisation for Public Food Supplies' (LMK: Lembaga Makanan Rakyat) was established to encourage people to consume healthy food with the still famous slogan: "Empat Sehat, Lima Sempurna" ("Four is Healthy, and Five is Perfect"). The slogan teaches that a healthy diet must consist of four essential components: carbohydrates, proteins, fats, vitamins, supplemented by the fifth component milk for calcium intake. Specifically, the objective of the National Ministry of Health is to increase the nutritional health of both mother and child for the purpose of the child's development and mother's survival. Such welfare programmes require the participation of all members of the community. According to the Orde Lama ('Old Order' or social political system under Soekarno), the best way to increase the health of both mother and child is "from people to people" (dari rakyat untuk rakyat). The motto: "from people to people" became a formal policy for almost all of Soekarno's developmental programmes.

Since the Soeharto Era, beginning in 1965, the paradigm of health approaches has changed. Previous policies were insufficient to achieve welfare for the Indonesian people. Therefore, the 'Family Planning Programme' (*Program Keluarga Berencana*) was set up to reduce the number of childbirths by using the slogan "*Norma Keluarga Kecil Bahagia Sejahtera*" (NKKBS: "Norm for Small Happy Family Welfare"). The Family Planning Programme, which was rejected by the *Orde Lama* Government, was only applied by a NGO 'Association for Indonesian Family Planning' (PKBI: *Perkumpulan Keluarga Berencana Indonesia*). However, in 1965, the Family Planning Programme became an integral part of Indonesia's national development.

Djajanegara (1991) states in the First Five-Year Plan (*Rencana Pembangunan Lima Tahun I*) that the objective of the Family Planning Programme was to increase the health status and welfare of mother, child, family and nation alike. All activities and health programmes were to be firmly integrated into Community Health Centres, namely the *Puskesmas (Pusat Kesehatan Masyarakat)* or health facilities in outreach located in every sub-district (*kecamatan*). However, not all rural populations have been able to make use of such services. Geographical, social and cultural distances between *Puskesmas* and the local

communities are part of the reason. Adding to the problem, in the Third Five-Year Plan (*Repelita III*, 1979–1984), the idea was put forward to stimulate the public's participation in the implementation of activities to prevent disease and promote health under the PHC strategy introduced by the National Government. The concept initiated the idea of *kader kesehatan* (volunteer health worker) as the key to improved conditions affecting public health. The idea was justified as follows: health volunteers selected from within a community will understand the health conditions for their particular community. Health volunteers must function as mediators between the *Puskesmas* and community, to persuade resisting community members to use health-care facilities and to accept willingly health programmes for the prevention of disease and promotion of improved health.

Programmes aimed at stimulating public participation continued to become the main policy of Fourth Five-Year Plan (*Repelita IV*, 1984–1989). By embedding a health sector in village organisations like 'Rural Community Resilience Institution' (LKMD: *Lembaga Ketahanan Masyarakat Desa*) and the sub-section of 'Family Welfare Empowerment' (PKK: *Pembinaan Kesejahteraan Keluarga*), the health volunteer is expected to take social programmes designed by the Health Department to the public. In the conceptual framework, special emphasis is placed on the *Posyandu* (Integrated Services Post), the prime activities of which are expected to be carried out with the support of paramedics serving the community, specifically women and children. 'Health Care for Mother and Child' (KIA) was designed separately and then introduced and integrated simultaneously into the community as one package.

In 1989 a policy, namely the *Bidan di Desa* (BDD) Programme, for placing *bidan* (CMW) in rural areas was implemented. *Bidan* would become the key to managing problems related to pregnancy, delivery and post-partum care. As part of the *Repelita* Plan, the Department of Health decided to distribute 18.900 *bidan* into rural areas across Indonesia. Then in 1995/1996, an additional 5.285 *bidan* were located in West Java, meaning that 90% of the rural areas were provided with certified midwives. Data from the West Java Health Office shows that, in 2000, 5.513 *bidan* had already been positioned in West Java (Profile West Java Health Office, 2000). The placement of *bidan* in rural areas was strengthened by Presidential Decree No. 23 in 1994 when *bidan* became non-permanent government officers by appointment (Agenda of Community Midwives).

In 1999 WHO, with the support of international organisations such as UNFPA, UNICEF and the World Bank, promoted the 'Making Pregnancy Safer' (MPS) Programme to help eradicate factors often responsible for maternal deaths. WHO emphasises the global need for all governments and societies to take the following steps: focus more attention on the accessibility of essential obstetric facilities through 'Safe Motherhood' programmes as a priority for national and international development; set up standardised national recommendations for maternal and neonatal health care; develop systems which guarantee implementation of basic health treatment; reconstruct access to maternal and neonatal health and family planning in public or private sectors; promote maternal and neonatal health care and fertility control at household and community levels, and improve monitoring systems in Maternal and Child Health.

The main causes of maternal death in Indonesia are: post-partum haemorrhages generally because the placenta remains in the womb, infection, pre-clampsia, prolonged labour, and complications during abortion. Maternal deaths usually occur during delivery;

this situation could actually be improved by carrying out routine examinations and giving advice on the intake of good nutrition during pregnancy. A high-risk pregnancy can often be detected during the third-stage examination by a skilled health provider. A pregnant woman who visits an antenatal care facility will be examined by a Community Midwife (*bidan*) for body weight and general health, prescribed iron tablets, given TT immunization, and a consultation.

The 'Making Pregnancy Safer' (MPS) target implemented in Indonesia is to decrease the MMR to 225 deaths per 100.000; however, at the end of 2000, the MMR had only dropped to 334 deaths per 100.000. Then, on 12 October 2000, the President of the Republic of Indonesia together with the Department of Health and General Directorate of WHO signed an agreement for the "National Movement for Safe Pregnancy as a development strategy in national health to reach Health for All in Indonesia by the year 2010 [Gerakan Nasional Kehamilan yang Aman sebagai Strategi Pembangunan Kesehatan Nasional menuju Indonesia Sehat 2010]". The follow-up is a national strategy for making pregnancy safer. Pambudi (2003) describes that: before the implementation of the 'Making Pregnancy Safer' (MPS) Programme, WHO had conducted a 'Safe Motherhood Assessment' with the following results:

- (1) Haemorrhage happens ten times more often during delivery, generally during stage III of delivery rather than during pregnancy.
- (2) The quality of antenatal care is still poor; *paraji* (TBA) find it difficult to pinpoint women at high risk so there is no foolproof guarantee that high-risk pregnancies will be detected at an early stage.
- (3) Not every referral hospital at the district level has staff and the necessary equipment, included blood transfusions, to cope with obstetric and neonatal emergencies.
- (4) Maternal mortality is closely related to an inadequately functioning referral system, within the community and health facilities.
- (5) Factors which influence maternal death are: (a) the health status of a woman and her readiness for pregnancy; (b) the number of antenatal examinations; (c) the delivery and immediate post-partum care.

Only few health facilities in rural areas can operate properly for emergency obstetric and neonatal care. An effort has been made to establish birthing homes or *Polindes* (*Pondok Bersalin Desa* – village maternity home)⁴ as a community-based programme for obstetric and neonatal care by Community Midwives (*bidan di desa*). *Polindes* are newly built or community houses which have a spare room for obstetric and neonatal services at the village level, especially in remote areas. However, only 50% of all villages in Indonesia are covered and not all function successfully.

The 'top-down' method during government intervention may influence and divided the behaviour of the community towards pregnancy into three groups. (1) One group will use only the traditional medical system for every stage of pregnancy up to childbirth. (2) A second group will use a combination (plural) of medical systems; they will go to a modern medical system for antenatal care but, after being assured that their pregnancy appears to pose no risk, will prefer to use a traditional medical system. (3) A third group will choose to use a completely modern medical system for every stage of pregnancy and childbirth.

Unfortunately, the group which turns to the traditional medical system for every stage of pregnancy comprises the rural poor. In a study carried out in villages in Bale Endah Sub-District, Bandung, West Java, on the use of Misoprostol (*Pas Bayi*) to reduce haemorrhage, Ambaretnani & Sitaresmi (2003) show that *Bidan* (CMW) and *paraji* (TBA) in these villages share their responsibility equally. Since *paraji* are not permitted to give injections, Misoprostol⁵ tablets provide them with an acceptable alternative when faced with an unexpected haemorrhage during delivery. The group which is used plural – combined traditional and modern – services for pregnancy, delivery, and post-partum care are still larger than that which only uses modern MCH services. This fact illustrates the important role *paraji* play in rural settings.

Bernstein & Miller (2002) point out that, for the best ante- and perinatal care, the birth attendant should be a health provider trained to deal with the four main causes of death in mothers and infants: (1) too young when getting pregnant; (2) too late to identify high-risk pregnancies which causes delays in deciding to seek medical care; (3) too late transporting the mother to obtain treatment at a health facility; (4) too many childbirths as well as unplanned pregnancies. Although more than 80% of pregnant women aged 15–49 years have received antenatal care at least once during pregnancy, according to the 1994 Demographic Survey on Health in Indonesia (SDKI), only 43.2% of all childbirths have been attended by skilled health providers. Koblinsky, Morgem and Anderson (1997) state that: in fact, among the 130 million childbirths each year in developing countries, only 50% are assisted by a skilled health provider.

One policy addressing the ongoing shortage (until 2007) of bidan (CMW) in remote areas in Sukabumi District recognizes that paraji (TBA) must continue practicing midwifery out of necessity. Pikiran Rakyat (2007: 1) notes that while Sukabumi District needs 113 bidan to provide MCH services, it would take at least 3 years to train a paraji. The policy is to train paraji in order to fill the gaps at MCH facilities in the area. In contrast, Sumedang District has adopted a policy of integrated MCH care through partnerships where bidan and paraji collaborate to deal with the high rate of maternal and infant deaths. Even sanctions will be imposed on bidan and paraji if a woman gives birth without their collaborative help. Unfortunately, according to the newspaper Pikiran Rakyat (2007), paraji are losing their ability to assist at deliveries because, within partnerships, Government policies only recognize the bidan as skilled representative of modern MCH care, capable of assisting parturient women.

Niehof (1992: 168) states that: "... the ongoing debate on the Traditional Birth Attendant has to do with both potential roles an agent of change, and her performance as a midwife. She is required to give up harmful practices — with all the debate about what is or is not harmful with this entails. Given the comparatively high infant mortality in Indonesia — about 14% (Hull 1981:107) of which is almost certainly due to septic traditional practices at birth — and given the high level of maternal mortality, the medical establishment's concern about Traditional Birth Attendant treatment of babies and mothers is legitimate. I am not disputing that there is a cause for concern, but I do question the effectiveness of policies based on an ambivalent attitude, which is prepared to use the Traditional Birth Attendant because she is needed, while rejecting her in her traditional role. An alternative approach should take as its point of departure the essence of the role of the Traditional Birth Attendant, mediation". In addition, Niehof points to the definition of

mediation: 6 "... a course of action by which an actor, here called 'mediator', tries to establish communication between two parties who are unable to communicate satisfactorily in a direct way. This communication can take several forms. The importance of the mediator depends on the respective parties' need for communication. The results of the mediation will depend on the mediator's personal qualities and social position, as well as on the culturally and socially defined requirements with respect to the mediating role concerned and the circumstances in which mediation takes place". While Landy (1977: 468–469) shows that: "... the traditional curers within the context of change resulting from culture contact and from internal evolutionary change effects on the curers role of the contest between indigenous systems of medicine and the Western medical systems. Adaptation of the curing role under acculturation and change in a series of selected societies is considered and a typology is derived of the curer's role as 'adaptive', 'attenuated', or 'emergent'". In the case of Indonesia, paraji (TBA) fulfil diverse roles as indigenous healers, depending on Government policies and MCH programmes implemented in the respective areas.

5.4 Role of Traditional Birth Attendants in Indonesia

Traditional Maternal and Child Health (MCH) systems can be found in every community throughout the world. Traditional Birth Attendants (TBA: paraji/dukun bayi) are key figures in rural areas, providing services for pregnant, peri- and post-natal women (until 40 days after birth). paraji have gained wisdom and expertise through experience and from knowledge handed down from senior indigenous healers, such as: mother, grandmother, or other elder woman in her social environment. The types of services provided by paraji range from traditional antenatal examination, massage, consultation, preparation of herbal or traditional medicines, as well as performing rituals. Their traditional practices during labour and delivery must be supported by a national health provider, or Community Midwife (bidan), who has more knowledge about ante- and perinatal reproductive process and who must also dig deeply to discover what she knows about medicinal plants for use during pregnancy and childbirth. Massage and herbal remedies are part of a paraji's repertoire to manage ante- and perinatal problems.

5.4.1 *Paraji* (Traditional Birth Attendant)

The paraji (TBA) is an indigenous midwife. She is usually an older woman who speaks the same language as the community in which she practices. She is illiterate (for the Latin alphabet, although she might read Arabic) and less likely to speak Indonesian. She practices midwifery as a part-time occupation. The socio-economic status of a paraji or dukun bayi is usually poor, since her main occupation might be agricultural labour worker under a landlord who pays low wages. Alisjahbana (1993) explains that becoming a paraji does not require any formal training; knowledge is gained through assisting and observing the senior birth attendant – maybe her mother, grandmother, relative, or neighbour. Usually these women are mediators par excellence. In addition, Niehof (1992) informs us that they have a culturally defined mediatory role in helping women become mothers and in assisting infants enter this world. Niehof (1992: 167) states that: "... by enlisting the traditional birth

attendant's help in reaching rural women in order to persuade them to participate in modern mother-and-child health and family-planning programs, the traditional birth attendant is effectively assigned another mediatory role — a new and sometimes unwanted role. A traditional birth attendant is a person who assists the mother during childbirth and initially acquired her skills by delivering babies herself or through apprenticeship to other traditional birth attendants. Further, a traditional birth attendant is usually a mature woman who has given birth to live children. She is a member of the community she serves. Though often illiterate, she speaks the language and not only understands but is an integral part of the religious and cultural system. Traditional birth attendants are generally wise, intelligent women who have been chosen by the women in their family or village for their practical approach and experience. Many traditional birth attendants have dynamic personalities and are accepted as figures of authority in the community. Traditional birth attendants are private practitioners who negotiate their own compensation with clients. Sometimes they receive payment in the form of cash or gifts; usually their compensation includes favored status in the community."

To reduce Maternal (MMR) and Infant (IMR) Mortality Rates, the National Department of Health through Provincial Health Offices conducted several training courses for *paraji* to improve their knowledge about pregnancy, labour and delivery, especially how to detect a high-risk pregnancy, how to refer a difficult delivery should it occur, and how to handle the umbilical cord hygienically. A *paraji* who has been trained in modern biomedical practices is given a 'Dukun Kit'. Paraji are seen as being part of an extended family in the community because of their role in guarding the household's health. When a *paraji* has successfully assisted a pregnant woman (*cocok*), then that client's daughter and grand-daughter will also probably decide to use the same traditional system when they become pregnant. There is trust involved in maintaining a good relationship between client and *paraji* who not only assists during childbirth but also performs rituals during pregnancy and post-partum care.

Pregnancy

A woman will probably suspect that she is pregnant when she notices a delayed menstruation and/or other usual symptoms such as vomiting, nausea, change in appetite, and aversion to certain foods. Although unusual, several husbands of respondents began complaining about the same symptoms experienced during their wife's pregnancy, such as difficulty in consuming certain foods, aversion to the odour of specific foods, craving for unusual foodstuffs like sour-tasting or out-of-season fruit. Not every woman recognises her own signs of pregnancy. Some women only discover their condition after first consulting with a *paraji*. In Sundanese culture, during her early stage of pregnancy a woman is not considered to be fully pregnant, although her pregnancy has been officially confirmed by a traditional *paraji* or community-employed *bidan*. The local belief is that pregnancy only becomes a fact after an expectant woman has experienced a trembling sensation in her abdomen at ca. 4 months.

Usually a midwife's work begins when a woman stops menstruating at ca. 2 weeks to 2–3 months (first stage of pregnancy). Usually a woman will confirm her pregnancy by visiting a *bidan* or *paraji*. A more educated or financially secure woman will test herself using a pregnancy pack ('Sensitive' or 'Lotus' brand) which can be bought from a

drugstore. After confirming that she is pregnant, she will visit a *bidan* or medical doctor at a *Puskesmas* for a further check-up.

Paraji (TBA) usually attain their status through personal experience or by putting to practice indigenous knowledge systems handed down through generations of indigenous healers who have gone before. Some indigenous healers receive knowledge through dreams, personal experiences, informal instruction from a senior paraji, or when asked by chance to help deliver a baby when no one else is available. Alisjahbana (1993) tells us that a paraji often learns from her own observation and experience while assisting at a birth. A paraji's practices will include such techniques as massaging a pregnant woman's abdomen to adjust the foetal position and giving advice about nutrition. She is also thought to be able to predict the gender of the foetus from the shape of the woman's belly: a round belly indicates a girl and a pointed belly suggests a boy.

The household survey shows that certain behaviours and types of food are still considered taboo in the community. Several activities are taboo for the following reasons: if one sits in a doorway, then labour and delivery will be difficult; if the expectant father drapes an item around his neck, then the umbilical cord will choke the baby; if one eats from a small plate, then the foetus will remain small enough not to complicate delivery. Pregnant women living in certain areas in Rancaekek used to carry a sharp object such as a nail, small knife or tiny scissors as amulet to ward off evil spirits. Husbands must also avoid certain activities, such as slaughtering animals, attending cock fights and arguing with his spouse, to avoid disrupting foetal development. In particular, slaughtering an animal will cause the baby's body to be abnormal.

Consuming the following foodstuffs is taboo during pregnancy. Eating/drinking ice will cause an enlarged foetus. Foods to avoid are (a) those with a fishy smell, (b) those with a high protein content: for example, egg (endog), fish (lauk), eel (belut), type of snail found in rice fields (tutut), shrimp (udang), and (c) those fruits like pineapple (ganas, Ananas comosus), papaya (gedang, Carica papaya L.), cucumber (bonteng, Cucumis sativus L.), banana (pisang ambon, Musaceae), durian (kadu, Durio zibethnus), jack-fruit (nangka, Artocarpus heterophyllus), avocado (alpuket), sweet potato (hui, Ipmoea batatas poir), taleus (Colocasia giganteum Hook), young coconut and its milk, salak (Salacca zalacca), and all sour-tasting fruits.

Paraji (TBA) also suggest which foods are nutritious and how to care for the breasts during and after pregnancy. Pregnant woman are advised to eat green leafy vegetables to stimulate the production of breast milk. When the woman's pregnancy reaches about the eighth month, she will be advised to walk frequently to facilitate delivery. She must consume half-raw egg yolks from ayam kampung (local chicken) to strengthen her body for labour and delivery, drink coconut milk to assure that the baby's skin will be clear, and take one spoonful of coconut oil every morning to facilitate delivery.

The most significant moment occurs during the second stage of pregnancy when movement of the foetus is felt for the first time. According to Muslim tradition, a ceremony must be held at this time to celebration the belief which the baby's soul has been blown into its body by Allāh (God) at ca. 4 months gestation. At the celebration a group of women (and sometimes men) from a group of *pengajian* will pray for blessings and read verses from *sūrah Yusuf* from the Holy Qur'ān with the hope that the baby will be as good looking

and wise as Prophet Muḥammad. This ceremony is held repeatedly for each new pregnancy.



Figure 5.2 Four trained *paraji* or *dukun bayi* (seated) and two *bidan* standing during a monthly meeting at *Puskesmas* Nanjung Mekar (Source: Field Study 2006)

Generally, community members who perform this ritual at 4 months will not take part in the 7-month ceremony, according to the beliefs of Islam. The 7-month ceremony relates to indigenous beliefs about this stage of pregnancy when, based on several facts, a premature birth can occur. During the ceremony held at 4 months, a *paraji* (TBA) is present but plays no part, because the ritual is performed by a Muslim religious leader. Albeit while the *paraji* is probably also a Muslim; she is not considered as a religious leader. Her course of action is now focused on strengthening the baby. During the first stage or trimester (0–3 months) of pregnancy, it is the mother who requires more attention.

During a first pregnancy, more rituals are conducted to provide psychological support for the woman entering a new stage in her life cycle. At 7 months, the pregnancy reaches another turning point and attention now becomes focused on the approaching delivery. Traditionally, at 7 months, the pregnancy is considered mature enough for the foetus to survive while, at 8 months, the pregnancy will briefly revert to a 'weaker' state. The exact time to deliver a mature infant is at 9 months. Many people in the community believe that a paraji has spiritual powers to conduct rituals for a safe pregnancy and childbirth. Her position within the ceremony is as intermediary between the pregnant woman and the world of supernatural beings. On a suitable day a nujuh bulan 7-month ritual is held during which the paraji will make the required preparations to celebrate the woman's first

pregnancy. The expectant mother is bathed with water from seven springs, perfumed by petals from seven types of fragrant flowers. The number '7' obviously represents the 7th month of pregnancy. The pregnant woman wears a 'batik sarong' while being bathed by seven older women. Then the *paraji* drops slippery items symbolic for an easy birth into the woman's sarong (one at a time): an egg, an eel, etc.



Figure 5.3 *Paraji* or *dukun bayi* estimating the stage of pregnancy by palpating the abdomen of a pregnant woman in Rancaekek.

(Source: Field Study 2006)

Bathing is symbolic for purification of the expectant mother and her baby. After the bath, the *paraji* will help the woman change her sarong and *kebaya* (traditional blouse) seven times (seven sets of batik clothing and *kebaya*). Each time she dons a set of clothing, each woman in attendance will criticise what she is wearing. After changing clothes six times, she will finally be complimented for choosing the seventh outfit which suits her. Thereafter, she must 'sell' *rujak* to her guests who will buy it using fake coins made from 'broken' tiles. Tasty *rujak* indicates that the infant will be a girl, and *vice versa*. At the same time, however, the husband must cut a yellow coconut in half to predict the baby's gender. Before ultrasonography became available, opposite sides of a yellow coconut were decorated with *wayang* puppet figures: *Arjuna* (male) represents a boy and *Subadra* (female) a girl.

An indigenous healer is famous for her patience and tolerance when encouraging a woman both physically and emotionally during labour and delivery. Formerly childbirth took place either at home or in the *paraji*'s house. A member of the expectant woman's family invites the *paraji* to assist during delivery along with other family members or neighbours. Her role during the trials of labour and delivery is as birth attendant, companion, and caretaker for the woman in pain. At the same time she helps calm the

husband and makes arrangements for actual childbirth. Usually a family member helps her calm the parturient woman and lends a helping hand when the *paraji* needs something from the house such as boiling water, batik cloth/sarong or sweet tea. Giving birth at home is favoured by women because they can remain in their familiar environment, surrounded by trustworthy family and friends who offer support and psychological reassurance. The *paraji* uses simple tools such as: scissors, cotton, alcohol, and bettadine. Her perceptions about cleanliness and sterility are based on local knowledge which often differs from the modern concept 'clean and sterile'. When a *paraji* washes her hands with a mixture of water and bettadine, she is still touching an unsterile object.

Paraji (TBA) can generally recognize the danger signs during pregnancy, labour and delivery because most have been enrolled in at least one training course supervised by doctors and bidan (CMW) at a Puskesmas. Training provides information about how to assist during parturition, what to do if a pregnancy becomes complicated, and where to turn for referral. During the household survey, each paraji concurred that, if a problem arises during delivery, she must refer the parturient woman to a modern health provider or bidan. Each paraji also practices under the supervision of a bidan and must report in a birthing journal which measures she has taken for each and every pregnancy. The supervisor, who is a bidan, will be the one to whom she turns in case of an emergency. The traditional paraji or dukun bayi is also responsible for transporting a pregnant woman to a Puskesmas if the bidan is not available at her private clinic. Naturally, the indigenous healer will be accompanied by a health volunteer (kader kesehatan) during the referral, because the paraji is usually an older woman probably not fluent in Bahasa Indonesia.

Childbirth

Out of habit, during the third stage or trimester of pregnancy (7–9 months), an expectant woman will begin preparing herself for the moment labour begins by eating less salty food to avoid oedema and high blood pressure. Traditionally, as already mentioned, she will eat from a small plate so the foetus will not be too large at birth, swallow a spoonful of coconut oil every morning for an easy delivery, remove the husk from a coconut shell, symbolic for the baby's head, because hair can cause severe pain, and so forth.

The *Paraji* (TBA) will be fetched when a pregnant woman signals that labour has begun. Sometimes the *paraji*'s house is quite far away, and it will take time to reach the parturient woman. However, regardless of the distance or time of day, the *paraji* will respond. During delivery, all family members remain outside the room where the woman is in labour. Relatives or neighbours will try to help in any way necessary, like bringing boiled water to sterilize the implements for delivery. The indigenous healer will always try to encourage the woman in labour, guiding her in how to control her breathing during contractions, and feeding her sweet tea to replenish her energy and calm her nerves. The *paraji* will avoid doing internal manipulations and try to deliver the baby more or less using the 'peaceful touch' of her hands. Generally, labour will take from 1 to 3 hours; a longer period of labour could signal a prolonged and difficult delivery. If this occurs, the *paraji* is expected to suggest referral to a Community Midwife (*bidan*); and if the delivery becomes uncontrollable and the baby cannot be expelled after several attempts, then the traditional *paraji* or will throw open all the windows and doors of the house as a symbol that the 'birthing door' is open for the newborn's arrival.

After delivery, the *paraji* will wait until the placenta is expelled from the womb. During this time she will clean the face, nose and mouth of the newborn to prevent it from swallowing amniotic fluid. After the placenta has been born, she will cut the umbilical cord using sterilized scissors, a razor blade or bamboo knife. The stump of the baby's naval will be tied with thread, disinfected with betadine, then bandaged using materials from her midwifery kit. A number of traditional *paraji* will use the *sirih* (*piper betle L*.) leaf to cover the baby's naval.

Later, the *paraji* will clean the newborn, wrap it tightly inside a small blanket (*di bedong*), and lay it to rest on the bed. After delivering the newborn and placenta, the mother will be massaged from head to toe and washed with lukewarm water before her waist and belly are wrapped tightly with *bebengkung* or *gurita* (a long piece of cloth). Because the placenta is understood to be the baby's sibling – they have shared the womb during pregnancy – it should be treated well. The *paraji* will place the placenta in a *pendil* (earthen bowl) *disamaraan* (spiced) with *santen* coconut milk (*Cocos nucifera Linn.*), sliced *bawang beureum* or shallot (*Allium cepa Linn.*), *koneng* or *kunyit* (turmeric, *Curcumae Domesticae Rhizoma*), sugar, salt, and tamarind. The bowl is then covered with white textile and tied with white cotton thread. The spices symbolize the sweet, salty, sour taste of life which the newborn will encounter in the future. A ritual party will be held, attended by family and neighbours, when the placenta is buried in the yard behind the house; during the next 40 nights, a member of the household will place a *cempor* (tiny kerosene lamp) above the placenta's cemetery.

Forty Days after Delivery

Between parturition and 40 days thereafter, the post-partum woman remains under the supervision of the *paraji* who will daily rub lotion (*pilis*) on the mother's forehead to improve her eyesight and relieve dizziness, and massage ointment (*tapel*) onto the skin of her abdomen to reduce stretch marks before wrapping the mother from belly to waist with a piece of *bebengkung* cloth. The wrapping will relieve stomach ache and also help firm a flabby belly. *Bobok* will be sprinkled on her arms and legs to relieve swelling, cramps, and fatigue as well as accelerate blood circulation.

Colostrums, or the mother's first breast milk, is not given to the baby because it is thought to be *cai susu bari* (spoilt milk); instead the newborn is fed water mixed with honey. The *paraji* will advise the mother to drink *jamu habis bersalin* (traditional concoction for post-partum women) prepared by the *paraji* or bought ready-made from the drugstore to quicken post-partum recovery and prevent illness. As Niehof (1992: 243) states that: "... the baby is almost entirely dependent upon its mother's milk during the first months of its existence, the mother has to take care that her supply is sufficient and the milk is of good quality". Jamu is also used to restore a woman's figure and, after 40 days, to help strengthen the new mother before she resumes her household and social duties, including sexual intercourse. During the final ceremony, usually led by a religious leader (kiyai), the infant's hair is cut and prayers said to Allāh.

5.4.2 Use of MAC Plants in Traditional Maternal and Child Health

Medicinal, Aromatic and Cosmetic (MAC) plants are recurrently used in traditional Maternal and Child Health (MCH), beginning when a woman confirms her pregnancy and must watch more carefully what types of food she should or should not eat. Traditionally, plants and fruits with a 'sharp' character should be avoided, such as: pineapples, chillies, jack-fruit, durian, etc.

As she reaches the end of her pregnancy, the woman is urged to take a spoon of coconut oil in order to have an easy (slippery) deliver. MAC plants are most often used after childbirth to help restore a woman's health, stamina and former figure. In particular, to eliminate the putrid odour of blood, for 40 days after parturition she will use parts of plants such as *seureuh* or betle leaves, *ketumbar* (*Coriandri Fructus*), *kunyit* (*Curcumae domesticae Rhizoma*), and *delima* (*Granati Pericarpium*).

In compliance with traditional Maternal and Child Health, the use of jamu is an important issue worthy of discussion. Herbal remedies can be prepared at home for personal use or bought from a jamu gendong vendor who makes concoctions at home and sells them door to door. Specific types of jamu can also be bought in shops which sell industrial products from factories such as Jamu Air Mancur, Nyonya Meneer and Jamu Djago. Traditional methods for preparing, pulverizing and boiling herbal ingredients (jamu godok) are still used in Javanese society. Popular traditional tools for making jamu can still be found in many Javanese houses: i.e. lumpang (small iron mortar), pipisan (grinder), parut (grater), kuali (clay pot), etc. The types of concoctions sold by jamu gendong vendors vary, depending on the knowledge and practices learned from their clients as consumer. At least basic jamu can be mixed together according to its function and taste: e.g. kunir asem, cabe puyang, kunci suruh, beras kencur, pahitan and gula jawa. The ethnic background of most jamu gendong vendors is Javanese who wear kain-kebaya (traditional dress) and carry a basket packed with bottles on their back. Some jamu gendong vendors sell jamu powder (sachet); therefore they also bring along a thermos bottle in which to dissolve the powder, sometimes mixed with lemon, honey, and the egg yolk from a local chicken (telur ayam *kampung*). The virtue of drinking *jamu* is usually to prevent disease and improve one's physical well-being.

Currently, one can easily buy modern ready-made *jamu* packaged as powders, pills, capsules, drink and ointments. Ready-made *jamu* preparations come in several forms: as sachets which first need to be dissolved in hot water before use, pills, and liquids. In principle, there are two types of *jamu*. The first type is used to maintain physical fitness and health; popular local *jamu* is *galian singset* (to slenderize and keep a woman's body fit) and sehat lelaki (to keep a man's body healthy). The second type of *jamu* is to cure various kinds of disease. Moreover, there is also a special type of *jamu* created with the purpose to maintain a couple's harmonious sexual life. Some such popular products are: sari rapet which keeps a woman's sexual organs in good condition, and kuat lelaki (strong man) which is a similar product for men. The Javanese take great care of pregnant women during their antenatal and post-partum periods by producing specific types of *jamu*. There are also *jamu* concoctions for infants.

Hundreds of herbs suitable for *jamu* preparations are, among others: (1) spices such as *jahe* (ginger: Zingiber Officinale), lempuyang (Zingiber Oronaticum), temu Lawak (wild

ginger: Curcuma Cautkeridza), kunyit (turmeric: Curcuma Domestica), kencur (greater galingale: Kaemferi Galanga), lengkuas (ginger plant: Elpina Galanga), bengle or panglay (Zingiber Bevifalium); 2) leaves like: secang (Caesalpinia Sappan Hinn), sambang dara (Rexco Ecaria Bicolar Hassk), brotowali (Tiospora Rumpii Boerl), and adas (Foeniculum Vulgare Mill); (3) fruits like: jeruk nipis (calamondin: Citrae Aurantifalia Sivingle), ceplukan (Physalic Angulata Him), and nyamplung (Calophylum Inaphyllu); (4) bark like: kayu manis (cinnamon: Gijeyzahyza Glabra); (5) flowers like: melati (jasmin: Jataninum Sunbac Ait), and alang-alang (Gramineae) (www.JogloSemar). People continue consuming jamu due to its availability, low cost, and lack of side effects.

Afdhal and Welsch (1991: 149) point out: "... how an indigenous Indonesian cottage industry emerged so rapidly from a relatively insignificant sector of the non-formal economy to become a powerful element in the Indonesian health care industry". This development illustrates some of the complexities and paradoxes of pharmaceutical pluralism. Furthermore, they state that: "Jamu, conceived as an indigenous element of Indonesian culture, has become an important symbol of national identity; much of its appeal lies in its association with Indonesian 'tradition'. At the same time, its ability to compete successfully on the national market is in large part due to its emulation of imported products. Modern processing, packaging and marketing are also part of the appeal of jamu". The examples below describe the ready-made jamu packets for use after childbirth.

For internal use:

Jamu Bersalin I (10 sachets)

Although a number of jamu industries sell this kind of product, among the interesting examples for post-partum women are several concoctions (jamu habis bersalin) produced by Nyonya Meneer Jamu Factory. Jamu habis bersalin is prepared, using the timehonoured traditional Javanese process, to maintain and enhance the health and beauty of pregnant and/or post-partum women. This is an important restorative jamu for a body which has undergone extreme stress and contortions during pregnancy and childbirth. The Javanese people believe which, without effective post-partum care, a woman's body may not return to its former shape. Jamu habis bersalin can contain from 1 to 5 powders or pills for internal use as well as ointments for external application: tapel sirih, tapel ratus, tapel sosok, pilis singgul, parem, and telon oil. Jamu helps to purify the blood by washing out impurities. It refreshes and makes the body healthy, benefits lactation, and restores vigour after childbirth. Directions for use: Mix one sachet with 100 ml of lukewarm water, add a bit of salt and tamarind. The *jamu* must be taken 5 days after childbirth. Drink the contents of one sachet twice daily. Several ingredients are ketumbar (Coriandri Fructus), jungrahab (Baeckeae Folium), lempuyang wangi (Zingiberis aromaticae Rhizoma), gliserin (Glycyrrhizae Radix).

Jamu Bersalin II (20 sachets)

As a continuation of *Jamu Bersalin I*, this herbal mixture is effective in restoring the mother's health and vigour after childbirth. Directions for use: Mix one sachet with 100 ml of lukewarm water, add a bit of salt and tamarind. It drinks once daily for a period of 20 days.

Several ingredients are kencur (Kaempferiae angustifoliae Rhizoma), kunyit (Curcumae domesticae Rhizoma), jungrahab (Baeckeae Folium), and gliserin (Glycyrrhizae Radix).

Jamu Bersalin III (10 sachets)

This herbal mixture is a follow-up to *Jamu Bersalin II*. It helps restore the womb to its prepregnant state and refreshes and strengthens the body. Directions for use: Mix one sachet with 100 ml of lukewarm water, add a bit of salt and tamarind. It drinks once daily for a period of 10 days. Several ingredients are *lada* (*Piperis nigri Fructus*), *kemukus* (*Cubebae Fructus*), *majaan* (*Gallae*), and *ketumbar* (*Coriandri Fructus*).

Jamu Bersalin IV (5 sachets)

This herbal mixture is a continuance of *Jamu Bersalin III*. It helps slenderise, firm and rejuvenate the body, especially after childbirth. Directions for use: Mix one sachet with 100 ml of lukewarm water, add a bit of salt and tamarind. It drinks once daily for a period of 5 days. Several ingredients are *delima* (*Granati Pericarpium*), *kayu rapet* (*Parameriae Cortex*), *majaan* (*Gallae*), and *kencur* (*Kaempferiae angustifoliae Rhizoma*).

Jamu Bersalin V (5 sachets)

This herbal mixture is a continuation of *Jamu Bersalin IV*. It helps to reduce body fat and slenderises the body. Directions for use: Mix one sachet with 100 ml of lukewarm water, add a bit of salt and tamarind. It drinks once daily for a period of 5 days. Several ingredients are *jati belanda* (*Guazumae Folium*), *kayu secang* (*Sappan Lignum*), *kayu rapet* (*Parameriae Cortex*), and *delima* (*Granati Pericarpium*).

For external applications:

Pilis (10 sachets)

This ingredient relieves dizziness. It is good for health eyes after childbirth. Directions for use: Mix one sachet with a few drops of water. Rub on forehead every morning and afternoon after bathing. Ingredients: jungrahab (Baeckeae Folium), bengle (Zingiberis purpurei Rhizoma), temugiring (Curcumae heyneanae Rhizoma), bunga cengkeh (Caryophylli Flos), and pulosari (Alyxiae Cortex).

Tapel (10 sachets)

This herbal concoction is effective for women after childbirth. It relieves stomach ache and upset and helps firm flabby bellies. Directions for use: Mix one sachet with water, and then rub on the abdomen. Ingredients: *jungrahab* (*Baeckeae Folium*), *daun sirih* (*Piper Folium*), *temu kunci* (*Boesenbergiae Rhizoma*), *bengle* (*Zingiberis Rhizoma*), and *bunga cengkeh* (*Caryophylli Flos*).



Figure 5.4 Industrial Jamu (Jamu Habis Bersalin: Cap Potret, PT Nyonya Meneer) for use after

Source: Field Study (2007)

Bobok (5 pieces)

This ingredient relieves swelling, cramps, fatigue and helps to accelerate blood circulation. Directions for use: Mix one pill with a few drops of water (could be added to gandapura oil or lemongrass oil). Rub on feet or other painful parts of body. Ingredients: bengle (Zingiberis Rhizoma), kayu sintok (Sintok Cortex), kencur (Kaempferiae Rhizoma), cabe jawa (Retrofracti Fructus), pala (Myristicae Semen), and tepung beras or rice fluor (Amylum Oryzae).

Minyak Telon (1 bottle)

The oil will help warm the body relieve flatulence. Directions for use: Rub on the baby's stomach after bathing it. Ingredients: *minyak kayu putih (Oleum Cajuputi)*, *minyak adas (Oleum Foeniculi)*, and *minyak kelapa (Oleum Cocos)*.

Moreover, various types of *Jamu Habis Bersalin* can also be bought as an ointment for external application, depending on the needs of post-partum women. Several ointments such *tapel sirih*, *tapel ratus* and *parem* are used together with a 'Javanese wrap' (*bengkung*) around the woman's abdomen and waist, consisting of *Tapel sirih*, *Tapel Ratus*, *Tapel Sosok*, and *Parem* below:

Tapel sirih: This ointment should be used 7 days after birth to expel 'winds' which may have become trapped within the womb during delivery. If the 'winds' are not expelled, it is may weaken the mother's health as well as cause her to look permanently bloated. This treatment ensures that her figure will quickly return to normal. Ingredients: *Litsiae Cortex*,

lempuyang wangi (Zingiberis Rhizoma), daun sirih (Piperis betle Folium), and kencur (Kampferiae Rhizoma).

Tapel Ratus: This ointment is used 30 days after childbirth. It slenderizes the stomach and smoothens the skin by reducing cellulite and stretch marks. Ingredients: adas (Foeniculi Fructus), Saussureae Radix, kayu manis (Cinnamomi Fructus), and daun sembukan (Paederiae Folium).

Tapel Sosok: This ointment is used 17 days after childbirth. Ingredients: kayu cendana (Santali Lignum), bengle (Zingiberis Rhizoma), kayu manis (Cinnamomi Fructus), and daun sembukan (Paederiae Folium).

Parem: This ointment has a soothing and curative effect when applied to swollen parts of the body. It relieves strained muscles and aids blood circulation. Ingredients: minyak sere (Oleum Citronellae), kayu manis (Cinnamomi Fructus), kencur (Kaempferiae Rhizoma), and lempuyang wangi (Zingiberis Rhizoma).

Unfortunately, indigenous knowledge about the herbal concoctions used by indigenous healers after childbirth is being forgotten since industrially produced *jamu habis bersalin* is broadly accepted by both indigenous healers and the community. Of late, *paraji* prepares her own herbal mixtures less frequently. If a woman cannot afford to buy ready-made products, then the *paraji* will help by preparing herbal concoctions. In Rancaekek *paraji* or *dukun bayi* describe about forty kinds of *jamu (jamu opat puluh macem)*. The herbal remedies usually prepared by *paraji* are *kunyit-asem*, *beras kencur* which also include leaves from *suerueh* or *sirih* (betle leaves) boiled, soaked, or used raw for cleaning a woman's genitals post-partum. An indigenous healer's knowledge about herbals helps her explain and give advice on breast feeding, cleansing the blood, maternal and infant health, harmful foodstuffs to be avoided by both mother and infant.

5.5 Introduction of *Bidan* (Community Midwives)

5.5.1 Bidan di Desa (Community Midwives)

Health care in Indonesia includes both modern and traditional medical systems. Muzaham (1995) has stated that medical science is a discipline in which science is based on intellectual and scientific experimentation to explain causality, where diagnosis of disease means examining the history of the illness and the patient's medical record. Although both medical systems can play a part in the treatment of disease, their basic concepts differ greatly. Kalangie (1994) states that: "... the type of illness, perceptions and treatments are diverse from one to other social groups". The efficacy of treatments using medical and non-medical science can be judged by how they solve health problems and whether people are satisfied with the specific approach used. People accustomed to relying on Traditional Medicine will not easily switch to medical science methodologies because of a great difference in perceptions regarding social systems, culture, psychology, and economy.

Transformation of time-honoured knowledge systems is not as straightforward as simply changing skills. Time is required before new ideas, concepts and technology become part and parcel of people's lives. Foster (1973) mentions at least three obstacles blocking the way to implementation of planned programmes: *i.e.* (1) cultural barrier, (2) social barrier, and (3) psychological barrier. Learning to accept a modern medical system and then becoming willing to integrate it with long-standing traditional practices to create a complementary health package is a challenge facing most communities.

Following the principle of 'Health For All by the Year 2000', the National Health Development Programme focuses on the concept of Primary Health Care (PHC), with the *Puskesmas* (Community Health Centre) as the basic health facility, supported by a range of hospitals and other community-based health facilities. Implementation of health services in Indonesia is organised on five levels: central, provincial, district, sub-district and village. Primary Health Care at a sub-district level is provided by *Puskesmas*.



Figure 5.5 *Bidan* or Community Midwives drawing up a monthly report at the *Puskesmas* (Source: Household Survey 2005)

Organising health services within the community is essential for maternal, neonate and child health care, particularly for antenatal, perinatal and post-partum care. Instrumental for carrying out current health policies in the community are 7.243 community health centres, 21.115 sub-district health centres, and 243.783 integrated village health posts. Community participation is organized by the 'Family Welfare Empowerment' (PKK: *Pembinaan Kesejahteraan Keluarga*), with more than 1.2 million health volunteers functioning as mediator between health providers and the community. This infrastructure facilitates implementation of PHC services in communities under the responsible supervision of *Puskesmas*.

Since Maternal and Child Health (MCH) services represent the main activities at the community level, it is the *bidan* (CMW) and not doctors and nurses who make up the largest proportion of staff at *Puskesmas*. Training to become a nurse or midwife mainly takes place in specialised polytechnic schools. Training to become a nurse or midwife has undergone many changes in recent years, especially now that women are required to pass a 3-year Diploma Programme.

The Bidan di Desa-Pegawai Tidak Tetap (BDD-PTT) or 'Community Midwife-Temporary Employee' Programme has grown in importance, especially in view of the fact that Indonesia's Maternal (MMR) and Infant (IMR) Mortality Rates have shown a gradual decrease over the last decade. Midwifery training is aimed at young graduates from junior high school and provides a 3-year basic nursing programme followed by a 1-year midwifery training. This programme aims to ensure that trained health professionals are available at the village level. More than 54.000 Bidan (CMW) were deployed in rural villages during 1990-1996. Following extensive evaluation, the BDD Programme was discontinued in 1996-1997, after reaching the target. Consensus has been reached that, regardless of where trainees choose to work, either in a community hospital or *Puskesmas*, all practicing midwives must follow the same Three-Year Diploma (DIII) Programme. The Midwifery or D-III Programme began in 1996. Efforts have been made to upgrade bidan (CMW), either through specific in-service competency-based training, especially for intranatal care, or through part-time Diploma bridging programmes. Recent evaluations appear to suggest that efforts to increase the capacity of midwives to provide skilled care are proving successful (WHO–SEARO 2004).

The Community Midwife (*bidan*) is a skilled birth attendant competent to provide health care and assistance during and after pregnancy, labour and delivery. According to the 'Safe Motherhood Action Agenda' (1997: 31), a skilled midwife⁸ meets the following criteria:

- 1. Ensures a clean, safe, normal delivery, without unnecessary intervention;
- 2. Recognizes and responds appropriately to early warning signs of complications, either by managing them if within her or his competence (*e.g.* removal of placenta, repair of perinea or vaginal tears, administration of oxytocin for uterine haemorrhage, etc.) or by prompt referral to those who can carry out necessary obstetrical/surgical interventions;
- 3. Listens to the woman's complaint and provides her with culturally sensitive emotional support;
- 4. Provides both non- and pharmacological (if available) pain relief;
- 5. Monitors maternal and foetal well-being throughout and immediately after delivery;
- 6. Ensures that the newborn breathes on its own, provides protection from hypothermia and cord infection, and initiates early breastfeeding.

In addition, the Safe Motherhood Action Agenda (1997: 31) states that: "Ideally, skilled attendants are from the community they serve, and reside in or close to the community. As such they can play an important role in educating community members about maternal health and mobilizing resources for care and referral, if necessary. In addition, skilled attendants promote affective links within the medical system, for example by mediating between traditional health providers in the community, and physicians and other health

personnel within the formal system". In the 1980s, The Safe Motherhood Action Agenda (1997: 32) confirms that: the Indonesian Government made a commitment to train 54.000 Community Midwives (*Bidan di Desa*: BDD) by 1996–1997. They are junior high school graduates who receive 3 years of nursing education and 1 year of midwifery training. However, the programme faced some challenges in communities where *bidan* were assigned, because the regulation to educate a community member to become *bidan* could not be achieved. It was not easy to find girls graduating from junior high school who were willing to be trained as *bidan* in an area which needed skilled birth attendants: first, because local women were usually poorly educated; second, because not every girl graduating from junior high school (which is rare) is interested in becoming a *bidan* instead of an industrial employee.

The recent Antenatal Care benchmark set for *Bidan* (CMW) is that they should be able to deal with a minimum of 7 'T's (*Timbang* = weighing; *ukur Tekanan darah* = measuring blood pressure; *ukur Tinggi fundus uteri* = measuring the height of *fundus uteri*; *imunisasi Tetanus toxoid* = tetanus toxoid immunization; *TT lengkap* = complete TT; *pemberian Tablet zat besi* = iron (Fe) tablets; *Tes terhadap penyakit menular seksual* = test for sexually transmitted diseases). During pregnancy, in theory, a woman should consult the *bidan* at least four times: once in both the first and second trimesters and twice in the third trimester including delivery. If a pregnant woman adheres to the standard recommendation of no less than four consultations, she will increase her chances of having a healthy pregnancy and safe delivery.

5.5.2 *Puskesmas* (Community Health Centre)

Managed by District Health Offices, the function of a *Puskesmas* is to provide Primary Health Care (PHC) in the community. Their services are holistic, can be integrated and are affordable for the entire community. As institution, *Puskesmas* are community health-care units set up to alleviate certain health dilemmas, such as excessive inequality in health-care management, low quality of health environment, and inadequate insight into community health issues. As community health centre, a *Puskesmas* has a high potential to generate an innovative model for basic health care. Accordingly, staff at a *Puskesmas* should be committed to developing networks within the respective community and local institutions such as: 'Family Welfare Movement' (PKK: *Pembinaan Kesejahteraan Keluarga*), 'Rural Community Resilience Institution' (LKMD: *Lembaga Ketahanan Masyarakat Desa*), 'Scout Youth' (*Pramuka*), Traditional Birth Attendant (*paraji*), Community Health Volunteer (*Kader Kesehatan*), etc. As a community institution, *Puskesmas* have three functions: (1) as Centre for Health Development; (2) as Centre for Community and Household Empowerment; and (3) as Centre for Primary Health Care.

The *Puskesmas* is managed by the District Health Office (*Dinas Kesehatan*). Rancaekek has three *Puskesmas*: Rancaekek, Linggar, and Nanjung Mekar. *Puskesmas* are responsible for programmes in the following sectors: Maternal and Child Health, Family Planning, Nutrition, Environmental Health, Elimination of Infectious Diseases, Community Health, Dentistry, Opticians, Development of Traditional Medicine, and the like.



Figure 5.6 Daily Maternal and Child Health activities in a Rancaekek *Puskesmas* (Source: MPS Study 2001)

At a sub-district level, such as Rancaekek, three *Puskesmas* are operational and supported by *Pustu* (*Puskesmas Pembantu*), a satellite health service unit serving minor areas, and mobile *Puskesmas* to reach populations living in remote areas. Mobile *Puskesmas* are equipped with motorized vehicles and/or boats. A *bidan* (CMW) is assigned to each village, especially those with no health facilities. The *bidan* generally serves one village having a population of ca. 3.000. Her main duty is to stimulate individual participation through the *Posyandu* (Integrated Services Post) and group participation through the *Dasawisma* Programme which is an associated programme in which 10 neighbouring households focus on surmounting health and social problems. With regard to health problems within the *dasawisma*, referrals will be sent to a *Puskesmas* or hospital.

5.5.3 *Posyandu* (Integrated Services Post)

Posyandu is an acronym for Pos Pelayanan Terpadu ('Post for Integrated Services'). The idea behind Posyandu is serving through community participation. The Posyandu signifies both the event and post for integrated services, i.e. as major source for Maternal and Child Health (MCH) and family planning services. The post is owned and organized by the local community in partnership with PKK ('Family Welfare Empowerment'). The Posyandu is the location where monthly activities are conducted in 225.000 sub-villages in Indonesia each year. A Posyandu might be held in a villager's house, in the village community hall, or any place large enough or easily accessible to village residents.

Approximately 20% of the activities held in a *Posyandu* include immunization by *bidan* (CMW) or nurses from the Sub-District Health Centre and other types of simple medical

care; however, in other *Posyandu*, volunteer workers provide most of the services. According to Kollman (1990), *Posyandu* support five types of programmes:

- (1) Nutrition: *i.e.* weighing children (<5 years of age), giving food supplements and vitamin A preparations.
- (2) Maternal and Child Care: *i.e.* antenatal care for pregnant women and TT immunizations.
- (3) Family Planning: *i.e.* recruitment of Family Planning participants and distribution of contraceptives.
- (4) Immunisation Programme for Children <5 years: *i.e.* polio, chicken-pox, BCG and DPT immunisations.
- (5) Diarrhoea Control: *i.e.* distribution of oral rehydrated solution.

Posyandu activities are organised around the 'five-table system'; the specific functions performed at each table are the same throughout Indonesia: at Table 1 children are registered; at Table 2 children are weighed; at Table 3 results are recorded in the child's Growth Chart by a health volunteer; at Table 4 information about the baby's development is provided (*i.e*: better nutrition, oral rehydration, immunization, breastfeeding, and/or postponing the birth of a subsequent child); and at Table 5 medical treatment and supplementary foodstuffs are supplied.

Family Planning clients follow a similar trajectory. A (potential) user of contraceptives first registers at Table 1 before proceeding to Table 4 (information and motivation) to discuss her personal concerns with a health volunteer: *e.g.* (potential) interest in the use of contraceptives, problems encountered when using contraceptives, need to change the method of contraception. If the woman is new to family planning or if she has problems outside the volunteer worker's ability to help, she will be referred to Table 5 where she will meet a Government health official, usually a trained *bidan* (CMW). When a woman suffers serious health problems, or needs a contraceptive method which is not provided at the *Posyandu*, the *bidan* will refer her to the sub-district Community Health Centre (*Puskesmas*) or to the nearest urban hospital. In many cases, staff at a *Posyandu* will provide pills, intrauterine devices (IUD) and contraceptive implants as well as other easier to use methods for contraception.

The *Posyandu* functions under the auspices of health or community volunteers. Health volunteers meet both before and after monthly gatherings to make preparations and to evaluate what has taken place. Beforehand they establish their family planning agenda, with regard to time, location, and broad objectives. The health volunteers meet 3 days before an event to decide which women and children should receive special attention and who will take that responsibility, as well as who will be in charge of providing supplementary nutrition to the children. Two days before a gathering, community health volunteers go house-to-house to encourage neighbours to attend. The day before the *Posyandu* gathering, the health volunteers check that all equipment and provisions are already in place. After the event, they meet to evaluate their achievements and prepare data to report to higher levels.

Kader Kesehatan (Community Health Volunteer)

Health Volunteers are community members who help *Puskesmas* communicate with and spread information to the community at large about health programmes. This is an example of public participation in government programmes by members of the community. According to the Alma-Ata Declaration (1978), public participation is: "... for developing countries, the most realistic solution for attaining total population coverage with essential health care is to employ community health workers who can be trained in a short to perform specific tasks. They may be required to carry out a wide range of health care activities, or, alternatively, their functions may be restricted to certain aspects of health care, the total range being provided by a team of health workers, each performing a specific group of tasks. In many societies, it is advantageous if these health workers come from the community in which they live and are chosen by it, so that they have its support".



Figure 5.7 *Kader Kesehatan* (volunteer) weighing a baby at a *Posyandu*.

Source: Frontiers for Health

With regard to pregnancy and childbirth programmes, almost all health volunteers are women who are willing in their spare time to help the community improve health conditions. Health volunteers who are generally responsible for coordinating monthly *Posyandu* activities receive no salary as compensation, even for transportation. This does not deter them because, as active members of the community, they are interested in increasing their own knowledge about health issues, even without reimbursement. Sometimes a health volunteer will received a gift of appreciation from people they have helped. The religious background of all the health volunteers is Islamic, so they believe that doing something beneficial for others will be rewarded by Allāh (*pahala*).

In Rancaekek sub-district, 50 individuals are listed as health volunteers; however, since Government programmes are cross-departmental, some volunteers will also be involved in

other Government programmes on agriculture and education. In comparison, the BKKBN Programme also has its own community volunteer's or rather salaried BKKBN employees. Since there is great affinity between reproductive health and family planning programmes, sometimes health and family planning volunteers cooperate through *Puskesmas*, for instance when spreading information about 'Making Pregnancy Safer' (MPS) and 'Bureau of Mother and Child Welfare' (BKIA) Programmes.

The role of a health volunteer is to motivate and facilitate community participation in order to spread knowledge and change perceptions about pregnancy, childbirth and post-partum care. The health volunteer communicates ideas and information from the *Puskesmas* to the target group, especially to pregnant women, their families and community. The health volunteer's status is as intermediary between the health institution and the public. Every *Puskesmas* in Rancaekek has about ca. 14–18 health volunteers, depending on the number of people who have their roots in the villages where they work. Health volunteers are capable mediators between the community, including traditional *paraji*, and *Puskesmas* because they share the same social, cultural, economic and geographical background and speak the same language (Sundanese).

Rancaekek's population is multi-ethnic because the industrial area has attracted people from far and wide seeking employment as well as provides settlements for government employees. While many of Rancaekek's inhabitants have achieved a higher level of education, families in agricultural areas remain poorly educated. Health volunteers therefore play an essential role in helping to educate and motivate low-income less-educated families in order to help improve conditions for 'Safe Motherhood'.

5.6 Cooperation between *Paraji* and *Bidan*

5.6.1 Role of *Paraji* and *Bidan* in Community Service

Helping young and newly trained *bidan* (CMW) adapt to living in a different community, with specific traditions surrounding pregnancy and childbirth and with different social and cultural conditions, demands. Because many *bidan* do not even speak the community's dialect, bridging the communication gap often proves problematic. A young *bidan* will encounter community distrust because of her lack of experience in managing pregnancy and childbirth. She will need time to adapt to the new environment to which she is assigned. Few *bidan* have remained at their post to successfully fulfil their duties, while many others have eventually thrown in the towel and returned to their own villages or moved to urban areas to open their own midwifery practice. Even while continuing their practices, most *bidan* have chosen to move out of their rental houses. In some areas, shocking stories have emerged about how a dedicated *bidan* was robed and raped while on her way to help a parturient woman give birth during the night.

Bidan (CMW) are government employees required to be on duty in *Puskesmas* from Monday to Friday (08:00–16:00 h). Twenty bidan work in Rancaekek's three *Puskesmas*: *i.e.* eight in Rancaekek, seven in Nanjung Mekar, and five in Linggar. Most bidan run a private practice after office hours, generally located in their own house, which provides services including antenatal examinations as well as assisting during labour and delivery.

While some *bidan* are willing to make house calls, most prefer to examine their clients at their private practice. Some *bidan* even fetch pregnant woman by car to avoid the problem of transportation.

Because the government stipulates that every pregnant women has the right to be attend by a skilled practitioner during labour and delivery, a Community Midwife (bidan) is required to attend a Traditional Birth Attendant (TBA: paraji or dukun bayi) during delivery. Both bidan and paraji perform similar tasks for pregnant and perinatal women, although the paraji is neither allowed nor competent to repair tears in the perineum or vagina nor to administer oxytocin injections for uterine haemorrhage.



Figure 5.8 *Paraji* massaging a pregnant woman to stimulate psychological serenity and relaxation (Household Survey 2005)

5.6.2 Training *Paraji* in Maternal and Child Health Care

Paraji (TBA) are frequently trained and taught at *Puskesmas* how to recognise the signs which forewarn a risky pregnancy or childbirth in order to safeguard the life expectancy of mother and newborn. Therefore, one component of a Maternal and Child Health (MCH) system is to delegate *paraji* or *dukun bayi* as mediator in the community where a modern health-care system has been established. The public's preference for *paraji* for antenatal, perinatal and post-partum care is based on the following: (a) a *paraji* imparts a feeling of being in trustworthy hands; (b) the *paraji*'s equipment is sterilized (after the training); (c) a *paraji* is available any time of day; (d) a *paraji* visits her client's home; (e) a *paraji* feels familiar; (f) a *paraji* is approachable like a family member; (g) support can be obtained

from the Government's 'Social Safety Net-Health Department' Programme (JPS-BK: *Jaring Pengaman Sosial-Bidang Kesehatan*).

Paraji (Dukun Bayi) or		Bidan di Desa or	
	Traditional Birth Attendant		Community Midwife
1.	The paraji visits her client during and after	1.	The client herself must choose to seek help at the
	parturition.		health-care facility.
2.	Treatment is based on tradition. While differing somewhat from modern methods, it is accepted by	2.	Health care provided during pregnancy and childbirth must follow stringent regulations based
	the client and her family because the <i>paraji</i> can explain her actions.		on Western medical science, which is not easily understood by the client.
3.	Information about an illness includes both medical (biological and psychological) and spiritual aspects. Therefore, any treatment given will also be directed at healing both the body and mind, and	3.	Information provided addresses only medical, not spiritual, problems. Therefore, modern health care frequently fails to fulfil a client's expectations.
	have its roots in beliefs held by the local community.		
4.	The <i>paraji</i> will not only inquire about illness- related conditions but also discuss and provide information about experiences outside the illness.	4.	Any discussion is limited to actual health issues.
5.	The <i>paraji</i> 's approach is based on her daily relationship with her client and the family. Their bond extends beyond time and the actual issue of health.	5.	The midwife's approach remains professional, whether they have had one or many meetings. Relatively distance to the facility plays a part.
6.	The client can seek help from the <i>paraji</i> at any time both day and night.	6.	The medical facility is only opened during regular hours, and people do not dare to ask for help outside the scheduled times.
7.	A client is not only a biological machine and will require spiritual care and friendship when trying to cope with a problem.	7.	A client, whether physically or mentally suffering, is merely viewed as a sick individual who needs to be cured.
Eigen 50 Comparison between Propii (TDA) and Community Midwife (hiday)			

Figure 5.9 Comparison between *Paraji* (TBA) and Community Midwife (*bidan*) (Source: Zakaria 1989)

Furthermore, Zakaria (1989) reminds us that any attempt to improve Maternal and Child Health (MCH) services, as shown by training *paraji* (TBA), is not aimed at eradicating indigenous healers in favour of modern certified community midwives. Training *paraji* in fact illustrates the recognition and support of traditional alongside modern MCH systems, especially in areas where modern medical care is rare. Moreover, because of their training, *paraji* are now considered to be a close substitute for *bidan* (CMW) when a modern medical system is not in place. In his study, Zakaria (1989) makes a comparison between the activities of *bidan* and *paraji* during ante-peri and post-partum care.

5.6.3 Towards Partnerships between *Paraji* and *Bidan*

The term 'partnership' (kemitraan) in the context of Maternal and Child Health means the relationship between Paraji (TBA) and Bidan (CMW) who strive for a common goal: i.e. safe pregnancy and childbirth for the mother and her offspring as well as adequate postnatal/post-partum care. Moreover, there is a need for indigenous healers who are part of the community and who can advise households about health in general and women's health in particular. Encouraging paraji and bidan to work as partners is very important. There has

always been some friction between *bidan* and *paraji* as to their respective roles in MCH care, and their working relationships have often proved problematic.

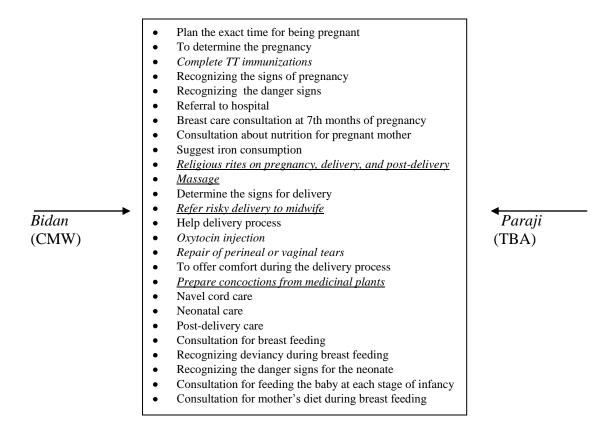


Figure 5.10 List of services provided by *Paraji* (TBA) or *Bidan* (CMW). Note: *Italicized* words concern *bidan* while *underscored italicized* words relate to *paraji*. (Source: Ambaretnani in Making Pregnancy Safer Annual Report 2001)

As member of the community, the *paraji* is normally one of the first people to hear that a woman in her neighbourhood is pregnant. It will be the *paraji* who offers advice to a pregnant woman about nutrition, taboos, and religious incantations, massage, breast feeding, bathing the newborn, rituals for specific periods of pregnancy, preparation of *jamu* concoctions, etc. In contrast, the relationship between the *bidan* and her client will remain more formal. It is the woman herself who must approach the *bidan* to register at a *Puskesmas* or private clinic where a logbook will be kept about her pregnancy.

Figure 5.10 shows the ante-, peri- and post-natal/post-partum services provided which relate to the tasks carried out by *paraji* (TBA) and *Bidan* (CMW). One can see that both the *bidan* and *paraji* provide almost similar antenatal, perinatal and post-partum services, except for TT immunization, repair of the perinea or vaginal tears; as mentioned before oxytocin injections during delivery which must be given by a skilled midwife.

A paraji (TBA) is most often an older local woman who has continued to live in the community in which she was raised. Therefore, she shares a similar socio-cultural background with other members of the community. Because she is experienced in helping

women in the community during pregnancy and childbirth, she is trusted by both young and older generations, especially those individuals whom she has helped in the past. People used to believe that *paraji* have spiritual powers for guaranteeing a safe delivery.



Figure 5.11 Partnership between a *paraji* (TBA) and *bidan* (CMW) preparing a woman for childbirth.

(Source: Making Pregnancy Safer Report 2001)

A *paraji* can express her extensive indigenous knowledge during traditional, or religious, ceremonies which are embedded in the local culture. This example illustrates clearly that both *Bidan* (CMW) and *paraji* (TBA) have their own particular, but sometimes similar, niche in the midwifery system. The *bidan* carries out responsibilities which require her to be a more competent and medically skilled health provider, while the *paraji* offers support, especially psychological, through the expression of traditional beliefs related to pregnancy, childbirth and post-partum care.

Their common objective is to provide effective health services to local communities. Today there is a stronger sense of partnership at the village level in terms of providing care for pregnant women, women in labour or giving birth, and both mothers and their newborns. The community regards the cost of childbirth assisted by a *paraji* relatively inexpensive compare to the cost of services offered by a government-employed *bidan*. It is common for a *paraji* to dedicate herself to helping women through childbirth without seeking payment. The compassion a pregnant woman feels for her *paraji* is undeniable and rooted in their shared background, language, common habits, and informal interaction. Normally, after childbirth, the woman's family will offer the *paraji* some form of gratitude

such as money or payment in kind (*e.g.* chickens, vegetables or other agricultural products). In contrast, a *bidan* receives a fixed fee for her services, although some *bidan* are quiet sensitive to a family's financial situation and allow payment in instalments.

The *paraji* (TBA) role during pregnancy, labour and delivery is associated with the community's social and cultural life. The concept of 'three delays' demonstrates the problem of postponement with regard to MCH-seeking behaviour of the woman's family, the community as well as the *paraji*. The consequence is that the community and *paraji* must therefore assume responsibility for the health of the mother and her offspring. Forming partnerships is one solution to reduce maternal and infant mortality. This approach should prove to be advantageous in remote areas with limited access to formal health facilities.

Once each month, one of the three *Puskesmas* in Rancaekek organise gatherings where *paraji* (TBA) and *bidan* (CMW) can share their experiences. At such a gathering, the *paraji* will report all her MCH activities during the past month, and then the *bidan* will do the same. The *bidan* will also share her knowledge on relevant issues and sometimes invite *paraji* to accompany her to a delivery. The aim of such meetings is to try to stimulate a two-way discussion between *paraji* and *bidan* and then sort out the similarities and differences between them.

In the field of midwifery, a new approach has been introduced called *asuhan kebidanan* or midwifery nurturing. The new approach applies the functions and activities which are part of the Community Midwife's (*bidan*) responsibility in providing professional health care to pregnant clients. Midwifery nurturing is based on the principle of expressing concern, empathy, understanding, compassion, and care for a woman during her pregnancy, delivery and post-partum periods. The *asuhan kebidanan* activities are adjusted according to the authority of the *bidan*, such as midwifery science, observation of the socio-cultural-based environment, psychological, emotional, and interpersonal relationships for improvement of MCH services. The *asuhan kebidanan* approach leads to partnerships and collaboration with women at a reproductive age. In reality, this new approach imitated the method used by *paraji* when providing their services to woman during pregnancy, delivery and post-partum care. On this basis, the formation of partnerships between *paraji* and *bidan* is unavoidable because they each share common objectives and can carry out tasks necessary to provide a safe and healthy condition for mother and her offspring during and after pregnancy.

Notes

- 1. *Kedukunan* is knowledge based on beliefs and inter-relationships with supernatural powers, spiritualism, religion, and tradition.
- 2. The word *gendong* means to 'carry on the back'. Early each morning well before dawn the *jamu gendong* vendor prepares several litres of three or four different types of *jamu* in her

- home, having purchased the ingredients from a local market. She measures out the plant materials, grinds them using a stone mortar and pestle, mixes them with water, and pours them into empty plastic bottles, puts the bottles into a large round bamboo basket, hoists the basket on to her back and sets off on her regular route.
- 3. TOGA is an acronym of *Taman Obat Keluarga*, literary referring to a 'Family Garden for Medicine'. It is associated with the term *Taman Gizi Keluarga* which indicates a 'Garden for Food for the Family'. In general, the practical use of plant material, and in particular that of medical plants, is widely believed among the population to offer several advantages over the use of chemical components (Slikkerveer and Slikkerveer 1995).
- 4. Alisjahbana's study in Tanjungsari, Sumedang, West Java, involved *paraji* (TBA) in charge in *Polindes* as partners of community midwives. *Polindes* is an acronym for *Pondok Bersalin Desa* or birthing home. A birthing home is a house where women can receive pregnancy and delivery services by *paraji* (TBA) under the supervision of community midwives.
- 5. Misoprostol (tablet *PAS Bayi*) is given as tablet to avoid or terminate bleeding during childbirth. It was introduced in a pilot project in Bale Endah, a sub-district in Bandung. A woman who is giving birth should take 4 tablets exactly after the baby's delivery and before the placenta is born.
- 6. Mediation can be defined as a course of action by which an actor, here called 'mediator', tries to establish communication between two parties who are unable to communicate satisfactorily in a direct way. Such communication can take several forms. The importance of the mediator depends on the respective parties' need for communication. The results of mediation will depend on the mediator's personal qualities and social position as well as on the culturally and socially defined requirements with respect to the mediating role concerned and the circumstances in which mediation takes place.
- 7. Aids from UNICEF (a portable aluminium box, easy to take along, containing mercurochrome, gauze bandages, soap, alcohol, cotton, scissors, rubber sheeting, bend-bowl, bowl, hand brush, soap can, hand cleaner, and pin set).
- 8. In the context of midwifery, therefore, 'skilled' implies the ability to provide competent care and assistance during pregnancy, childbirth, and the post-partum period. A skilled birth attendant can be midwife, a nurse with additional midwifery education, or a physician with appropriate training and experience, but does not include Traditional Birth Attendants (*paraji*), according to the definition now being used by WHO (Safe Motherhood Action Agenda 1997: 29).