# Kearifan Kesehatan Lokal: indigenous medical knowledge and practice for integrated nursing of the elderly with cardiovascular disease in Sumedang, West Java: towards transcultural nursing in Indonesia

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# CHAPTER II THEORETICAL ORIENTATION

## 2.1 Medical Pluralism and Nursing Utilisation

### 2.1.1 The Concept of Medical Pluralism

The purpose of this Chapter is to discuss related concepts, definitions and theories as the first step in conducting a study of the role of local health wisdom – indigenous medical knowledge systems in nursing for CVD among the elderly in Sumedang, West-Java, towards the development of transcultural nursing in Indonesia. This Chapter will discuss Medical Pluralism and Nursing Utilisation including the concept of Medical Pluralism, Ethnoscience and Indigenous Knowledge Systems, the importance of Indigenous Knowledge Systems, the concepts of Transcultural Nursing and the Evolution of Transcultural Nursing Theory, Cultural Competence in Nursing, Transcultural Perspectives in the Nursing of the Elderly, and the Study of the Plural Medical System. Special attention is given to the working definitions of traditional nursing institutions, transitional nursing organisations, and modern nursing organisations for the elderly with CVD, and help-seeking behaviour through local health wisdom. The topics will be discussed one by one based on literary sources, including: journal articles, monographs, computer databases, dissertations, conference processes, empirical studies, reports from community leaders, government and other organisations, as well as historical documents.

The concept of 'medical pluralism' was introduced by Leslie (1976, 1978, 1980) in his research in Asian societies as an elaboration of the general concept of the plural society, developed by Furnivall (1939) and Van Lier (1971). The paradigm of a plural society is described by Furnival (1939) to identify the political process in plural societies by: *'the presence of two or more separate communities living side by side, but separately, in the same political unit; economic divisions also coincide with cultural divisions'.* The concept was thereafter elaborated by Slikkerveer (1995) in the field of ethnomedicine in his concept of transcultural nursing utilisation in the Horn of Africa. The concept of medical pluralism provides a unique approach to studying patterns of utilisation behaviour of transcultural nursing services and has been successfully implemented in various regions (*cf.* Slikkerveer 1990, 1995; Agung 2005; Ibui 2017; Leurs 2010; Djen Amar 2010; Ambaretnani 2012; Chirangi 2013; Aiglsperger 2014; Saefullah 2019; De Bekker 2020; Febriyanti 2021).

Leslie (1978) states that the medical system uses categories of thoughts and attitudes that are common in society and inherently in cultural and social aspects through special specifications in aspects of community infrastructure. Leslie (1977: 9) defines the concept of medical pluralism as follows: "*pluralistic structures of various types of practitioners and institutional norms"*. Baer (2003: 11) added that: '*Medical pluralism develops in all societies divided into classes and tends to reflect a broader scope of class and social relations* [...].' The plural medical systems can be described as the dominant medical system for other medical systems. In other words, the dominant medical system, which has the support of the social elite, is more dominant than other medical systems. Slikkerveer (1990) notes that this approach has recently attracted scientific interest within the discussion of the role of diversity in human survival. Just as cultural pluralism, where two or more cultural systems are in constant contact, they maintain and exchange different ways of living, including their way of handling health and disease.

While the concept of medical pluralism is most contributive to the study of the existing indigenous medical knowledge and utilisation of care of the elderly with CVD in Sumedang, some criticism has been made on the concept since its introduction. Such criticism has come from supporters who emphasise the hierarchical patterns and the biomedical dominance in the modern world *(cf.* Baer, Singer, & Susser 2003; Baer 2004). However, according to Hsu (2008) in Penkala-Gawecka & Rajtar (2016), criticism on the concept of medical pluralism puts forward the perspective of professionals and not that of patients, creating 'awareness of wrong choice'. In addition, Hsu (2008) underscores that the critics of medical pluralism ignore the political, economic, structural and power issues and

reproduce the concept of a 'monolithic' biomedical system. The term *'medical pluralism'* is now becoming more popular in applied health systems research, partly inspired by the growing worldwide attention in the need for bio-cultural diversity and the recognition of the democratic rights of minority groups and indigenous peoples to utilise their own medical traditions in the modern word.

Through the growing popularity of Complementary and Alternative Medicine (CAM) and Traditional Medicine (TM) *vis-a-vis* the nursing funding crisis, the public is putting pressure on their governments to change the policies of nursing services, giving rise to the 'awakening' of the concept of medical pluralism (*cf.* Cant & Sharma 1999). Derived from the concept of medical pluralism, Gawecka & Rajtar (2016) explain that some scholars introduce other terms that are actually similar to medical pluralism, for example "*global assemblages*" (*cf.* Collier & Ong 2005), "*medicoscapes"* (*cf.* Horbst & Wolf 2014), "*medical landscape"* (*cf.* Hsu 2008), and "*medical diversity*" (*cf.* Parkin 2013). In addition, new terms have been proposed recently such as *'superdiversity'* (*cf.* Vertovec 2007) and '*hyperdiversity*' (*cf.* Hannah 2011). This happens because of the explosion of diverse immigrants with different socio-cultural backgrounds in European countries, which provides a challenge for scholars to develop the concept of hyper/superdiversity in nursing. Further research is needed to understand how the new reality of superdiversity influences nursing institutions and organisations, and patient attitudes (*cf.* Penkala-Gaweka & Rajtar 2016). Foster & Anderson (1978), McLean (1987) and Slikkerveer (1995) who all conducted various forms of health systems research in Sub-Sahara Africa document that health, illness and death are often related with magic and supernatural forces. Dichotomies in disease causation commonly refer to 'personalistic' and 'naturalistic' illnesses, previously described by Sigerist (1951) as 'magico-religious' and 'empirical-rational' illnesses.

As regards the relation between illnesses and beliefs that exist in Indonesia, several studies show that if a person is exposed to a disease, it is caused by an imbalance between the physical and spiritual conditions, so that treatment will focus on the restoration of the balance. For example, *mutih,* which refers to fasting, includes abstinence from eating and drinking in addition to only consuming white rice and mineral water (*cf.* Dove 1985 in Fatimah & Indrawasih 2010). Thus, such socio-cultural factors cannot be ignored as they are important considerations in the confidence of the public in the available medical systems. In addition, other factors of community life, level of education, socio-economic status, values etc. also affect people's behaviour patterns of medical systems. The Transcultural Nursing Utilisation Model, originally developed by Slikkerveer (1999), accommodates the various categories of factors which influence the utilisation behaviour of different medical systems in a region. This model has later been applied in subsequent studies in applied ethnoscience by Agung (2005); Ibui (2007); Leurs (2010); Djen Amar (2010); Ambaretnani (2012); Chirangi (2013); Aiglsperger (2014); Erwina (2019); Saefullah (2019); De Bekker (2020); Febriyanti (2021). In this model, which will also be applied in the present study in Sumedang, Slikkerveer (1999) documents and analyses the determinants influencing transcultural nursing utilisation behaviour through the analysis of predisposing factors, namely those related to the patient's socio-demographic and psychosocial factors, enabling factors in the form of socioeconomic factors, perceived needs and perceived morbidity factors, institutional and organisational factors and environmental factors. In addition, external factors are also included in the form of intervention factors influencing the patients' utilisation behaviour.

Diverse communities in terms of ethnicity, language, culture, customs, value systems, beliefs and religion are also characterised by variations in their dealing with various problems in daily life, including health and disease, especially in peoples' choice of health care provided by different co-existing medical systems, including traditional, transitional and modern medical systems. As Rienks & Iskandar (1985) in Dove (1988) mention, humans do not only rely on a medical system, but also on their religion and cosmology to cope with their problems of weakness or vulnerability. Religion and cosmology are institutions influencing human attitudes and behaviour to make their choices.
As Slikkerveer (1999b:171) underscores: '*Cosmovision refers specifically to the way in which members of certain cultures view their world, cosmos or universe,*' rendering cosmovisions to guide peoples' relationships with their natural, human and supernatural world.

### 2.1.2 Ethnoscience and Indigenous Knowledge Systems (IKS)

Ethnoscience is related to the perspective of Indigenous Knowledge in contributing to society. Indigenous knowledge has been defined by Warren, Slikkerveer & Brokensha (1995: xv) as: *'local knowledge that is unique to a particular culture or society* [*and*] *in contrast to international knowledge systems produced through global networks of universities and research institutions*.' Focusing on Indigenous Knowledge Systems (IKS), this study distinguishes between indigenous, traditional and/or local knowledge systems and international or modern knowledge systems, where the latter is often identified as scientific as opposed to traditional knowledge systems.

However, this research follows a line of reasoning, in which the practice of science, coupled with belief and magic, forms the universal characteristics of all human societies where both indigenous and international knowledge systems can be considered scientific. IKS is largely rooted in experience, which people gain from interactions with the natural, social and spiritual environment of their communities, which is transferred verbally from generation to generation. In general, IKS involves intangible socio-cultural aspects, which are related to the worldview or cosmovision of certain population groups. This is the basis for local-level decision-making in various sectors of society, including in the health sector. IKS can be defined as a dynamic, sustainable and adaptive knowledge, practice and belief system. IKS also advocates behaviour patterns that can be culturally adaptable to local settings and involve ways of continuous human interaction with the natural, social and spiritual environment (*cf.* Slikkerveer 1997; 1998; 1999; 2003).

The incorporation of indigenous knowledge into science is called *'ethnoscience*'; basically, indigenous knowledge is rational and rooted in the process of empirical research and scientific testing from generation to generation. Furthermore, Slikkerveer (2006) explains that 'ethnoscience' developed from the discipline of cognitive anthropology in the 1950s as a complement to science, which was introduced on the basis of ideas, perceptions, practices, experiences, and the wisdom of indigenous peoples themselves; the continuation of the emic view, the use of the language of the local people, the original classification of plants, animals, religion and life, as well as their native cosmology and philosophy about nature and the environment are the subject of 'ethnoscience' research (*cf.* Slikkerveer 2016 in Saefullah 2019). Ethnoscience is an interdisciplinary knowledge orientation that can be interpreted as a way of learning to understand how humans perceive their environment and how they make adaptations to their environment as reflected in their daily words and actions (*cf.* Saefullah 2019). Ethnoscience uses an emic perspective relating to the behaviour of a native population, which has been implemented from generation to generation and has benefited the community. On the other hand, (modern) science uses the researcher's perspective or etic view. Indigenous knowledge is often criticized by modern scientists who consider indigenous knowledge to be something that is unsystematic, irrational, superstitious, ethno-cultural, less progressive, and unable to meet the development needs of the modern world (*cf.* Scott 1998). This assumption results in the younger generation of indigenous groups generally underestimating their local culture and tending to follow modern lifestyles and technologies; thus, that indigenous knowledge is threatened and difficult to be preserved. Slikkerveer (1999) seeks to further operationalise ethnoscience into practice by proposing a methodological approach, the *'Leiden Ethnosystems Approach'* which will be further elaborated in Chapter III of this book. This methodology was established under the Leiden Tradition of Structural Anthropology where the approach integrates culture through local wisdom and development by identifying interrelated factors that cause people's behaviour in society. Thus, development policies, in this case, health care development, can be suggested not only based on an understanding of resource gaps between developing and developed countries, for example, but also by identifying people's behaviour in society, including their traditions, beliefs and actions based on emic views in local communities.

The *'Leiden Ethnosystems Approach'* was developed by Slikkerveer (1990; 1995) as an advanced ethnoscience research methodology and has been applied at the community level. It includes research by Agung (2005) on *Tri Hita Karana* in Bali, Ibui (2007) on MAC plants in Kenya, Leurs (2010) on MAC plants in Bali, Djen Amar (2010) on *Gunem Catur* in Lembang, Ambaretnani (2012) on *Paraji*

and *Bidan* in Rancaekek, Chirangi (2013) on Cooperation between Traditional and Modern Health Practitioners in Tanzania, Aiglsperger (2014) on Rural Health Care Development in Crete, Erwina (2019) on Health Communication and Information Systems in Sukamiskin, West-Java, Saefullah (2019) on *Gintingan* in Subang, West-Java, De Bekker (2020) on Transcultural Health Care Utilisation in Tanzania, and Febriyanti (2021) on MAC Plants for Diabetes Mellitus in the Tatar Sunda Region of West-Java.

These studies are highlighting the importance of indigenous knowledge, beliefs and institutions, involved in community-based development, which has been suggested as an ethnoscientific implementation of the emic approach of development. As mentioned before, the concept of 'institution' refers to a general set of norms, values and behaviours, which are formally or informally organised and practised over many generations at different levels (*cf.* Keohane 1988; Blunt & Warren 1996; Watson 2003; Slikkerveer 2019). It encompasses various levels of institutions, ranging from a community to a national and global level. At the community level, a specific norm such as the principle and practice of reciprocity is categorised as the basis of an institution, as it guides local people's behaviour and management of resources in various situations. Any general pattern of activity involving persistent and connected sets of informal and formal rules, which prescribe behavioural roles, constrain activity and shape expectations, are also part of such institutions.

By distinguishing between institutions and organisations, Slikkerveer (2019:30) states that institutions generally refer to: '*any regularised practices or patterns of behaviour structured by rules and norms of the society, which are widely used, either formal or informal*'. Similarly, Metha *et al.* (1999) also provide a broader perspective of institutions, by incorporating all community structures and practices, which have access to and control over resources, including arbitrarily contested resource claims. As regards indigenous institutions, Watson (2003) suggests that the concept of institutions includes conventional knowledge, 'regularised practices', indigenous knowledge systems and practices (*cf.* Keohane 1988; Watson 2003; Slikkerveer 2019). The importance of institutions in ethnoscience has been underscored in several studies (Warren, Slikkerveer & Brokensha 1995; Agung 2005; Blunt & Warren 1996; Seibel 2008). It can be concluded that institutions are part of ethnosystems where indigenous people use them as part of the local community systems, as such supporting the approach of 'development from the bottom' in sustainable development programmes.

Furthermore, Slikkerveer (1989: 19) defines 'ethnosystems' as: '*a set of conceptions and practices that are specific to an ethno-cultural group and are generally localised on the outskirts of the countryside, as opposed to a centralized urban system, which often originates from* [*modern society*].' In this way, Slikkerveer (1989) and Slikkerveer & Dechering (1995) also explain that ethnosystems which contrast with cosmopolitan systems or 'cosmosystems' go beyond the general understanding of indigenous knowledge systems to encompass the concept of indigenous culture, which includes beliefs, perceptions and practices, as well as local communication channels and decision-making patterns. Rooted in the long-term experience and wisdom of the society, ethnosystems provide a solid basis for building certain patterns of behaviour in relation to various sectors of the society, such as linguistics, education, medicine, agriculture, craftsmanship skills, and kinship and social structure, while promoting technological development and innovation original.

In this way, the *'Leiden Ethnosystems Approach'* broadens previous perspectives on IKS to include cognitive and behavioural components and to conduct research in a more holistic way. This approach allows for a more dynamic assessment of IKS in terms of including: historical processes of transculturation and acculturation; forms of interaction between local and international knowledge systems and the ethno- and cosmosystems; and the socio-economic development process (*cf.* Slikkerveer 1989; Slikkerveer & Dechering 1995; Slikkerveer 1999a; 1999b; 2003). Slikkerveer (1989), Ellen & Harris (1999), Slikkerveer & Dechering (1995) and Slikkerveer (1999b) argue that the behavioural *'Leiden Ethnosystems Approach'* for IKS studies adopts a 'bottom-up approach', which is largely based on participation among the populations under study and focused on the cultural dimension of development in the context of international cooperation.

While advocating a 'development from below' strategy, Slikkerveer & Dechering (1995: 436) identified the following five principles underlying the study of ethnosystems:

- (pre-)historical assessment of a particular community in its natural and cultural background;
- references to terms which are culturally specific or culturally bound;
- a holistic approach to the inclusion of various sub-systems of knowledge and technology in sectors such as medicine, agriculture, environment, education, and so on;
- a more dynamic assessment of the concept of "culture" in terms of the interaction of international and indigenous knowledge systems; and
- comparative orientation – rather than normative – towards the development process in a particular region or 'culture area'.

Thus, the 'Ethnosystems Approach' for IKS studies also encourages researchers to adopt an emic or insiders' view, which contrasts with an etic or outsider's perspective (*cf.* Slikkerveer 1989; 1999). The present research seeks to extend the focus of IKS geographically to Sumedang, West-Java, and to analyse indigenous knowledge systems, practices, and beliefs among elderly population groups with CVD living in Indonesia. As mentioned before, IKS has provided a solid basis for the formation of a traditional medical system. Specifically, this study adopted the *'Leiden Ethnosystems Approach'*

### 2.1.3 The Importance of Indigenous Medical Knowledge Systems

The majority of communities throughout the world have adapted to the challenges of disease by creating a broad system of medical knowledge and by developing behavioural patterns aimed at the treatment and prevention of disease, as well as in health promotion. The importance of Indigenous Knowledge Systems (IKS) in the context of overall nursing is rooted in ethnobotany and indigenous medical knowledge systems, both of which are specific examples of IKS. In general, IKS manifests itself in the form of traditional medicine and herbal medicine. Concepts and strategies related to the study of indigenous peoples' knowledge systems, practices, and beliefs are emphasised in the realm of ethnobotany, ethnomedical disciplines and medical anthropology. Traditional health and healing practices, which have been recorded as part of the initial ethnographic record on IKS, underwent a revitalisation during the second half of the 20th century in the new field of ethnoscience and its sub-fields (*cf.* Foster & Anderson 1978). Hughes (1968: 87) defines 'ethnomedicine' as: *'beliefs and practices relating to diseases which are the product of the development of indigenous cultures and are not explicitly derived from the conceptual framework of modern medicine'*. The definition is in line with Hahn (1995: 77), who defines 'ethnomedicine' as: *'the cultural reality of a community concerned with illness and healing'*. Slikkerveer (1990) argues that ethnomedical studies largely focus on traditional forms of medicines and the systems of knowledge, practices and beliefs of indigenous peoples with regard to health and disease, while they are often interpreted as 'illegitimate' and 'non-professional' forms of medicine. According to Foster & Anderson (1978), Foster (1983) and Slikkerveer (1990), ethnomedical research and medical anthropology are both involved in comparative studies – particularly cross-cultural and temporal – of bio-ecological and socio-cultural factors, which influence the concepts of health and disease.

Through the study of IKS, the behaviour process of health care utilisation can de documented and analysed, because they are directly related to the causal relationships among factors in their respective communities (*cf.* Aiglsperger 2014). Such knowledge of the socio-cultural factors which affect health and disease is also important for the design of strategies for improving nursing care. According to Slikkerveer (1990: 11), these factors: '*…have made a direct connection between medical knowledge systems and disease behaviour, which provide a more realistic basis for health planning'*. The statement is in line with the view of Foster & Anderson (1978) that efforts are needed to address inefficiencies in nursing services, especially in developing countries in the broader socio-cultural context of health and disease of population groups, rather than based on modern medical doctrines. By consequence, ethnomedical studies started to pay more attention to the study of patterns of the process of seeking institution-based nursing *(cf.* Foster & Anderson 1978; Slikkerveer 1990; WHO 2012). As Slikkerveer (1990: 3) concludes: *'Such perspectives on the pluralistic character of the nursing delivery system have provided a new scope for the development of comparative studies of the*

*socio-cultural contexts of medical systems, now referred to as new approaches to medical systems, also known as neo-ethnomedical research.'* Utilisation of plants for medical purposes has been identified as an important component of the utilisation patterns of health services in different communities. As a result, scholars of ethnoscience often combine ethnobotany and ethnomedical strategies in an effort to study the original concepts of health and disease in different cultures (*cf.* Slikkerveer 1999b; 2006).

Given the expanding research in herbal medicine, which involves the study of MAC plants as a widening subject in this field, also includes nursing studies (*cf.* Slikkerveer 1995; Ambaretnani 2009; Aiglsperger 2014). As such, theses studies have shown their potential to contribute to promoting the development of public health by bridging the gap between traditional and modern medical systems at the community level (*cf.* Slikkerveer 2006). In general, Slikkerveer (2006) observes that the scientific interest in the use of MAC plants has further developed across disciplines since the discovery and recognition of their crucial role in the industrial development of modern medicines.

Several scientists, including Balick (1994), Cotton (1996), Bodeker (1999), Skoula (2003), Slikkerveer (2006) and Aiglsperger (2014), argue that the ethnoscientific approach to the study of MAC plants significantly contributes not only to a general understanding of forms of medical care and increasing health care delivery, but also to the recovery and documentation of knowledge and classification of plants, and the cultivation and sustainable use of natural resources pertaining to biodiversity conservation through the involvement of local communities. As Slikkerveer (1999b: 42) stresses: *'The study of the categories of fundamental perceptions and the cosmovision of different cultures* [...] *is very important because it will not only encourage local use and possible exploitation of alternative crops which may be economically feasible, but we also can learn more about alternative philosophies related to nature and the environment which exist in the regions'.*

Slikkerveer (2003; 2006) also claims that ethnoscientific cross-cultural research approaches, which are mainly based on non-experimental validation techniques, advocate the analysis of plant effects at the individual level by analysing human factors, such as energy, activity, sleep and eating behaviour, and symptoms of disease. The ethnoscientific research approach also involves ethno-directed sampling techniques, where plants are collected on the basis of recommendations given by local healers, traditional birth attendants or patients (*cf.* Slikkerveer 1999). In addition, because this approach is culturally appropriate, it adds the human dimension to the validation process of MAC plant species for biochemical activity, which, in turn, supports the overall success of the ethnobotanical research.

However, recent patterns of overexploitation of natural plant resources and the loss of biodiversity, not least caused by the unlimited search for new pharmaceutical medicines, tend to threaten and eliminate the potential benefits of MAC plants for the local population (*cf.* Ayensu 1983; Balick 1994; Farnsworth 1994; Bodeker 1999; Slikkerveer 2003; 2006). In this regard, Balick (1994), Alcorn (1995), Balick & Cox (1996), Cotton (1996) and Bodeker (1999) observe that research conducted on IKS in relation to MAC plants has contributed valuable information for the conservation of biocultural diversity. As Bodeker (1999: 266) points out: '*Customary practice offers new directions in planning for conservation of medicinal plant biodiversity* '. In addition, the ethnoscience approach to the study of the use of MAC plants increases the general understanding of the local concepts of health and disease, which are needed to improve the structure of nursing and community welfare, strengthening the position of indigenous peoples in general (*cf.* Alcorn 1995; Balick & Cox 1996; Cotton 1996; Slikkerveer 2006). In this way, Balick & Cox (1996) and Slikkerveer (2017) suggest that ethnoscientific research on MAC plants provides a potential basis for the successful integration of traditional and modern medical systems. Given the rather significant contribution made by ethnobotanical studies in MAC plants in the fields of plant validation, biodiversity conservation, improvement of nursing and integration of traditional and modern medicine, many scholars stress the need for additional research for the protection of MAC plants and related IKS, especially regarding the application, efficacy and safety of MAC plants. Furthermore, ethnobotanical research could improve the collaboration between experts on local herbal medicine, and between national and international herbal industries.

This kind of research could also promote international pharmaceutical industries to apply the principles of sustainability and a justified distribution of benefits through the protection of the intellectual property rights of indigenous peoples (*cf.* Balick 1994; Alcorn 1995; Balick & Cox 1996; Cotton 1996; Skoula 2003; Slikkerveer 2006).

## 2.2 The Concept of Transcultural Nursing

### 2.2.1 The Development of Transcultural Nursing

As the development of anthropology in the 1950s included ethnoscience, in nursing and anthropology, Leininger first pioneered the concept of transcultural nursing. Transcultural nursing is defined as a field of study, research, and practices, which focuses on beliefs, culture, values, and practices in carrying out and maintaining nursing in cultural groups (*cf.* Leininger 1999). This is in line with what was expressed by Andrew and Boyle (2002) and McFarland & Wehbe-Alamah (2011) who help develop transcultural nursing and interpret it as a matter of sensitivity to the provision of nursing according to the needs of individuals, families, and groups in diverse cultural populations in the community and between communities. Leininger (1988) began this concept due to concerns about how nurses provide nursing services or carry out nursing practices which will describe or reflect their nursing knowledge. Nursing and culture are always related and cannot be separated in determining nursing decisions and actions. Transcultural nursing aims to understand and help various cultural groups and group members meet their nursing needs. A holistic assessment of aspects of culture, beliefs, and lifestyle or client behaviour will reduce the possibility of stress and conflict due to cultural misunderstandings. Leininger observes that medical practice is oriented towards healing, whereas nursing practice is oriented to actions and treatment processes which focus on various factors which affect health and disease (*cf.* Leininger 1980).

This pattern of human care and healing can be identified if the anthropological and nursing perspectives are integrated. The combination of treatment and healing patterns was initiated by Leininger with a knowledge base to develop and build concepts and hypotheses for cultural care theories (*cf.* Leininger 1980; 1984; 1988; 1988; 1989; 1991). Leininger acknowledges that there are deficiencies in nurses who are not prepared to face such challenges and their belief that patients have the right to be understood according to their socio-cultural background (*cf.* Leininger 1970). Courses and programmes were developed which came to be known as cross-cultural nursing (*cf.* Leininger 1984). Leininger's best-known topics are cultural care theory, concepts of care and caring, transcultural nursing concepts and qualitative research methods. Components of the cultural theory of diversity and care for universality and the Sunrise Model have been developed for more than three decades (*cf.* Figure 2.1). Leininger (1984) discovered at least 10 versions of the model. Although there are many versions of the model, there are two main articles which present the theory of Leininger's cultural care, published in 1985 and 1988. The development of the concept of care and attention is important to understanding the model and the evolution of Leininger's theory.

In the early 1970s, Leininger identified care and healing as nursing traits and how nursing and anthropology could complement each other. Treatment was first defined as a noun which implies *"the provision of personal services and those needed to help humans maintain their health condition or recover from illness"* (*cf.* Leininger, 1970: 30). Caring is a partner verb for nouns and Leininger believes it implies "*people's feelings of compassion, interest, attention, and concern for people"* (*cf.* Leininger 1970: 30). In the mid-1970s, Leininger began to develop a dichotomous idea between caring and healing. Concern is seen as the most important component of the consequences of preservation (*cf.* Leininger 1977).

In 1984, Leininger extended this idea to maintain that there could be no cure without treatment but that treatment could occur without healing. This became a strong foundation in healing and human well-being, so this statement was followed by a deepening of transcultural studies (*cf.* Andrew 2006; McFarland 2002 in McFarland & Wehbe-Alamah 2011). In the late 1970s, Leininger (1977) focused on the difference between general and professional care.

General care is defined as "*actions which help, support, or facilitate against or for other individuals or groups with clear or anticipated needs or improvements"* (*cf.* Leininger 1981: 9). In addition, professional nursing is also defined as "*humanistic and scientific modes which are learned cognitively to help individuals, families, or the community to receive personalized services"* (*cf.* Leininger 1981: 9). Leininger's focus on differentiating between treatments from the perspective of a layman in a culture known by professionals reflects her background in anthropology. A prominent theme is the importance of understanding the difference between emotional and ethical views. Emics refer to language expression, perceptions, beliefs, and certain cultural practices in terms of certain phenomena in the view of individuals or groups (*cf.* Leininger 1984; Slikkerveer & Dechering 1995). Etics refer to the expression of universal language, beliefs, and practices in the case of certain phenomena associated with multiple cultures or groups as external views (*cf.* Leininger 1984; Slikkerveer & Dechering 1995).

In the late 1980s, Leininger developed the concept of general care by identifying the concept of generic treatment knowledge, which is defined as referring to "*epistemological and theoretically derived sources which mark the nature of human phenomena" (cf.* Leininger 1988: 16). The concept of professional care knowledge is also being developed currently, referring to "*the application of generic knowledge, using professional knowledge about care, in creative and practical ways to alleviate [pain]*" (*cf.* Leininger 1988: 17). In the early 1980s, Leininger was known as the originator of the idea that nursing is synonymous with caring, with supported statements such as "*care is central to nursing, unique, dominant, and a uniting focus"* (*cf.* Leininger 1984: 92) and "*care is nursing*" (*cf.* Leininger 1984: 83). These themes remain to this day. Leininger also distinguishes between human concern and scientific concern. Humanistic concerns are characterized as "*behaviour, experience, and interactivity between two or more people or groups in which the action of accompaniment or empowerment is carried out in general*" (*cf.* Leininger 1981: 101).

Such non-empirical ideas are in line with the terms of the original knowledge system. Scientific care differs from being tested on activities and assessments in helping individuals or groups based on verified and measurable knowledge related to certain variables, such as empirical studies (*cf.* Leininger 1981). Diversity and care are other concerns that Leininger defines as comparative transcultural nursing (*cf.* Leininger 1981). Thus, it is important to study culturally congruent care and analyse similarities and differences in care/caring between cultures. This theme is the basis for the diversity of cultural care theories and universality.

The diversity of cultural care is defined as variability and differences in meanings, patterns, values, life, and symbols of caring within or between collectivity, related to assistance, support and facilitation, or allowing expression of human care. Meanwhile, the universality of cultural concern refers to the same, dominant concern over the meanings, patterns, values, life, or symbols which are manifested, help, support, facilitate, or allow a way to help people, other individuals, or groups originating from certain cultures to improve the conditions of humans or ways of life (*cf.* Leininger 1991). Leininger further developed the concept of care by describing ethnocaring and cultural care. Ethnocaring is defined as an emic cognitive assistive, facilitating, or supporting action which is valued and practiced to help individuals, families, or groups. Cultural care is defined as the values, beliefs, and lifestyles which are studied subjectively and objectively, which help, support, facilitate, or allow other individuals or groups to maintain their well-being and health, to improve human conditions and their way of life in dealing with illness, disability, or death (*cf.* Leininger 1991).

Thus, the concepts of ethnocaring and cultural care are very closely related and can sometimes be used interchangeably. Many of Leininger's concepts overlap, for example: diversity of cultural care, universality of cultural care, cultural care accommodation, preservation of cultural care, repatterning of cultural care, and new cultural care practices. Leininger (1995a, 2002a, 2002b, 2006a) developed the ethnonursing method, a unique qualitative method which includes ethnography, reflecting the richness of mixed preparations in nursing and anthropology. Leininger (1995) emphasizes not only learning from people but also learning from them in an environment they know.

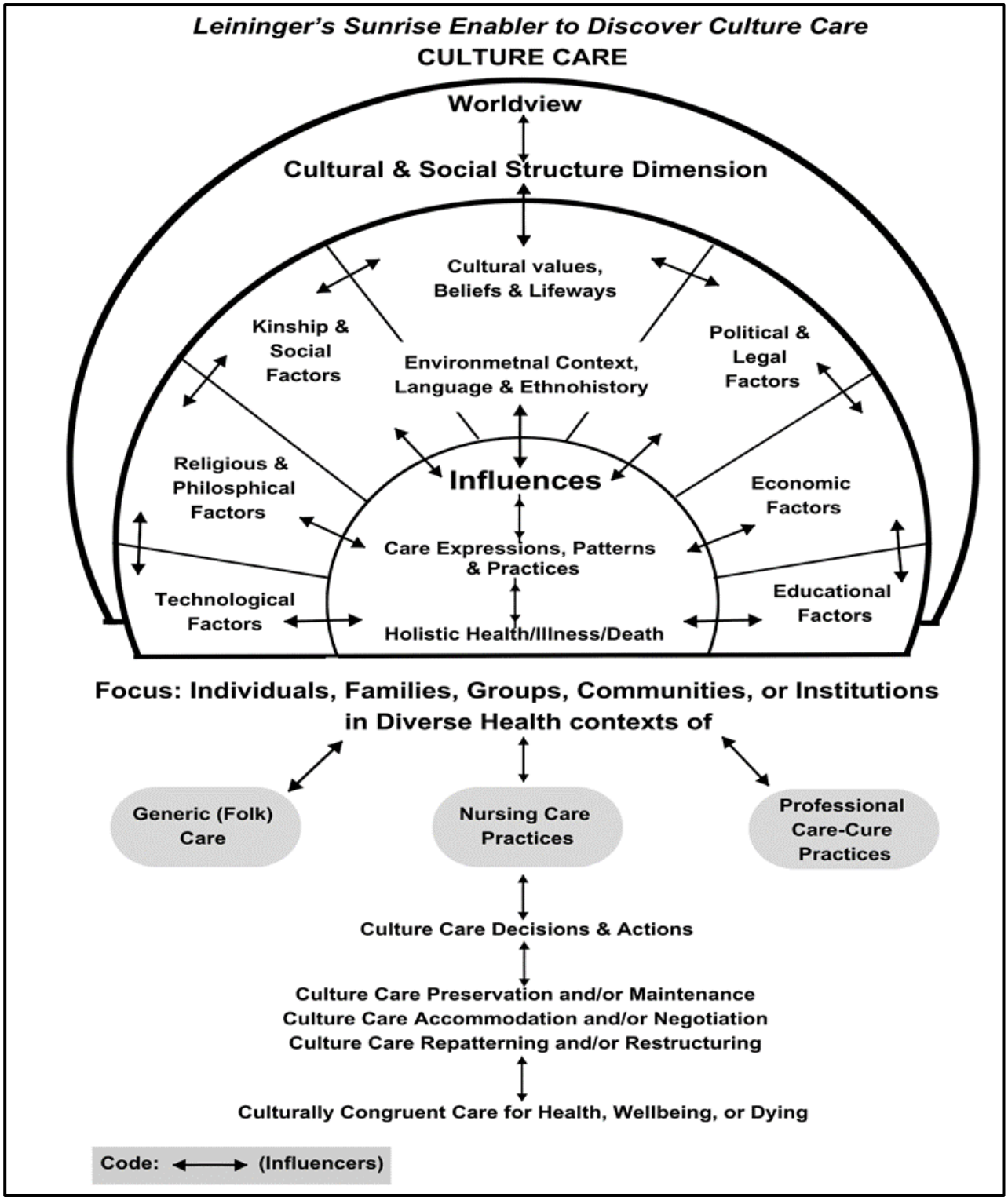


Figure 2. The Sunrise Enabler Model
*Source*: Adapted from Leininger (2002).

Many nurses have conducted research using the ethnonursing method, adding to the body of knowledge in transcultural nursing. Disregarding tools and instruments as "*impersonal and mechanistic and in accordance with objectification,*" Leininger (2006: 58) prefers to use enablers to demonstrate participatory approaches and friendliness in the research process. Leininger calls this enabler a foreign-friend enabler and an observation-participation-reflection enabler. When researchers move from strangers (ethics) to friends during the ethnonursing process, it is more likely to collect accurate and meaningful data. This model applies to research conducted in a variety of

settings where nurses explore interesting phenomena (*cf.* Leininger 2006a). Basing it on anthropology, Leininger (2006a) develops an observation-participation-reflection enabler in the 1960s, but added reflection to fit the ethnonursing method. Analysing data when using the ethnonursing method is a very detailed process. In this way, research will meet the criteria of *"credibility, repetitive patterns, confirmability, meaning in context"* (*cf.* Leininger 2006a: 62) and other requirements of qualitative research.

Based on Leininger's concepts, theories, and transcultural nursing models, there are several scholars that have developed theories related to other aspects in the context of culturally appropriate nursing, including: Purnell (1995) who developed the Model for Cultural Competence, Andrews-Boyle (1999) who created the Transcultural Nursing Assessment Guide for Individuals and Families, Giger & Davidhizar (2002) who developed the Transcultural Assessment Model, Campinha-Bacote (2003) who introduced the Process of Cultural Competence in the Delivery of Nursing Services and Biblically Based Models of Cultural Competence, and Spector (2004) who developed the Health Traditions Model. Many scholars have an interest in developing the concept of transcultural nursing, so they gather in an organisation called the Transcultural Nursing Society (TCNS). Leuning, Swiggum, and Wiegert. McCollough-Zander (2002) in Sagar (2012) use the theory of Cultural Diversity and Leininger's Universality, along with the cultural competency model of Campinha-Bacote (2003), to develop Transcultural Nursing Standards and foster excellence in transcultural nursing (*cf.* Sagar 2012). These standards are useful in practice but can also help in curriculum development, hospital programmes and accreditation, and in research (*cf.* Leuning 2002). There are also many research nurses who are active in exploring new nursing phenomena, such as Gunn & Davis (2011), Mixer (2011), Morris (2012), Schumacher (2010), and Wehbe-Alamah (2011) (*cf.* McFarland & Wehbe-Alamah 2011).

Thus, the theory of Cultural Care and Universality can be applied in nursing practice, education, administration, and research. Transcultural nursing anticipates similarities and differences in nursing and medical systems and nursing practices in diverse cultural and community contexts. The global development of the transcultural nursing discipline depends on international collaborative research efforts and the dissemination of knowledge throughout the world to advance and improve care in ways which are culturally meaningful to clients, families and communities. This is intended to make a major contribution to the dissemination of transcultural nursing knowledge locally and internationally (*cf.* Omeri & Raymond 2009). This research on local health wisdom, and indigenous medical knowledge systems in elderly care with CVDs, are expected to contribute to the development of transcultural nursing practice in Indonesia.

### 2.2.2 Cultural Competencies in Nursing

The diversity which is developing in Indonesia requires that the national nursing system must care about cultural aspects and be responsive to the needs of each individual. Nursing providers have to be competent in culture to effectively, professionally and sensitively deal with a variety of different cultures and to diagnose, recommend and implement nursing strategies which coincide with the client's cultural preferences. Skills in cultural competencies are important for all nursing providers at all levels of institutions, organisations and disciplines. Every health worker has to take personal responsibility to ensure their own level of cultural competence (*cf.* Brathwaite 2003; Campinha-Bacote 2002b; Giger & Davidhizar 2002; HRSA 2001a; Jeffreys 2010a; Leininger 2002b, 2002c; Lipson & DeSantis 2007; Purnell 2008; Willis 1999, and Sagar 2012, in Shen 2015). The following are assumptions about cultural competence in nursing:

- Cultural competence in nursing is basically about ensuring that people are open to respecting and knowing about cultural differences between people, having knowledge of these differences;

- Cultural competence in nursing is not the ultimate goal for nursing providers but it is an ongoing reflexive journey which includes diverse and complex initiatives at both the personal and organizational level; and
- After the ability is achieved in one aspect of cultural competence, there will always be new culture, a new tradition, or a set of skills which require learning or renewal, so that the learning process never stops.

It is generally recognised that ethnicity and culture cannot be easily shared. There is recognition that similar people's innate desires, wishes, hopes, and fears are more similar than those who are different to them. People want to be loved and they expect good health, death and fear of people who are dying and are generally afraid of pain and the unknown. Because culture can influence one's health decisions, it is the duty of health practitioners to be as culturally competent as possible when dealing with diverse populations. If this is ignored, it is likely that cultural clashes will occur due to the level of cultural competence (*cf.* Leininger 2002; Jovanovic 2012).

### 2.3 The Plural Nursing System of the Elderly with Cardiovascular Disease

Older adults are forming a heterogeneous sector of the population and will have various strengths and needs which require different levels of nursing, assistance, and social support. The continuing care needs of older adults will be met through various services provided in home-based care in the community, retirement communities, shared care facilities, assisted care centers, and acute and long-term care facilities. Nurses plan and implement treatments which facilitate the independence of the elderly and improve the quality of life and well-being through the development of elderly clients from self-care to extended care arrangements. Nurses in their many roles also treat adults who are hospitalized, showing consistent and ongoing patient contact and coordination of acute care and extended care resources (*cf.* Chang *et.al* 2007; Kim *et. al* 2010).

Culture influences the way people view aging; thus, groups of older clients vary in their adjustment to aging and in behaviours and practices related to health and illness. Culture is not the only determinant of behaviour but it is also an important dimension in understanding the interactions of older clients in their families and in encompassing social context. When nurses pay attention to the client's cultural background, they tend to apply more personal care to the needs of each client in order to take each individual's circumstances into consideration. Resources available at the community, funding for long-term care, and community-level interventions will influence the choice of older clients in their care and utilisation of a series of treatments. By understanding that older clients as participants in the utilisation of nursing are influenced by the culture of the family, nurses can also consider the family as a resource for providing nursing in their home. The traditions and cultural values of older clients will influence their preference for the place of residence. Social and economic factors, including acculturation, also influence the retention of traditional cultural values and practices. In assessing older adults, nurses have to consider individuals in the context of society, their cultural background, and their families, who have various strengths, resources, and capacities to care for elderly family members.

In order to develop culturally appropriate care for adults, nurses first must consider that the context for providing care to clients is governed by how the available national, regional and local nursing resources are affordable for older people. Rural and urban locations influence differences in the reach of information and referral sources, acute and extended care facilities, and community-based services which are available for older adults to support their quality of life (*cf.* Kaakinen 2010; Jovanovic 2012). There are three parts which emphasise the dimensions which nurses regard as relevant to the planning of care for the elderly, including the following:

1. *social and economic factors*, which affect older adults in finding long-term behaviours and care plans, as these factors influence the eligibility or limitation of older adults to receive preventive or acute care, or care from the nursing system. Moreover, interventions to control cost spending on

medical care tend to shorten hospital stays and to close gaps in nursing services. Health institutions generally exert a greater burden on older patients for their home- and community-based care;

2. *community-level factors*, which include cultural values, practices, care patterns, and resources, including resources of formal and informal assistance available to older clients. Different cultural traditions include values such as age, which influence the patterns of caring for older adult family members, who often ask for further assistance. Younger family members may become acculturated and change their traditional behaviours, which may differ from the expectations of older adults to be treated at home; and

3. *factors in the interaction of needs and resources*, which affect older adults and their families who cope with illness and take decisions in the continuum of care and services. Female family members, who are traditionally considered as primary providers of care to older family members, may enter the workforce and as such are no longer available to provide home care. The economic situation of the family, the closeness to older adults, and the available resources of formal support in the community to a large extent determine the choice of care of the elderly.

As explained at the beginning of this Chapter, in the context of medical pluralism, Indonesia has a diversity of nursing systems available in the community, as utilised by its members. This study departs from the framework of the community's understanding of traditional medicine, which cannot be separated from the socio-cultural system of the surrounding communities, so that each community has a certain way of using traditional medicine for the different types of diseases they are facing. Traditional medicine is still one of the primary options for treatment in the community (*cf.* Fatimah & Indrawasih 2010). Ample evidence shows that many Indonesians still choose to use traditional medicine to solve their health problems, either by first trying to self-medicate if they feel sick, using natural ingredients from *jamu* found in their homes. They also seek help from *orang pintar* ('smart people') or from *kyai* or *ajengan* ('treatment providers'), or from the *dukun* ('traditional haler'). Katno (2009), Nursiyah (2013), and Situmorang & Harianja (2014) support these phenomena, and agree that the increasing interest of the community in utilising traditional medicine is because people feel that traditional medicine is based on natural ingredients which are cheaper, while the raw materials are easier to obtain, especialy from plants grown by themselves. Moreover, generally, a plant has more than one pharmacological component, that is beneficial for the treatment of certain degenerative and metabolic diseases.

In addition, the local wisdom of the community promotes the use of traditional medicines. The discussion about traditional medicine will, of course, take place in relation with modern medicine. The different concepts are the result of the process of changing concepts of health and disease in society. These changes produce a condition in which people are free to choose the type of treatment they want. If this traditional treatment effort is unsuccessful, then they begin to move by utilizing modern health services, whether going to the *puskesmas*, clinical doctors or hospitals (*cf.* Djen Amar 2010; Ambaretnani 2012; Erwina 2019). Indonesia, representing a plural society, is different in terms of ethnicity, language, culture, customs, value systems, beliefs and religions, and has a variety of systems in dealing with various problems in daily life, including in terms of health, especially in terms of choosing the nursing services which are considered suitable. This is indicated by the existence of various types of nursing institutions and organisations available in the community, defined as the Plural Nursing Systems, including; traditional nursing institutions, transitional nursing organisations, as well as modern nursing organisations.

Slikkerveer (2016) states that an institution refers to a complex of roles, rules and behaviours adhered to by a group of individuals in the society which have been in place for a long period of time, often over many generations, and can operate formally or informally. As Saefullah (2019) explains, the behaviour of the use of each service provided by an institution is an action which results from a complex decision-making process, where the process cannot avoid psychological, cultural, economic, internal and external environment aspects related to individuals representing the perspective of the

household, because it involves the services of various community institutions and organisations, especially in nursing.

Nursing refers to the maintenance and restoration of health at a more organizational level, namely the provision of medical care by trained professionals or related institutions to individuals or communities (*cf.* Aiglsperger 2014). According to Slikkerveer (1990: 27*): Nursing is becoming increasingly linked to socio-economic and political considerations, where emphasis is placed on an integrated approach to development from within the community itself*'. Subjective interpretation and social response to disease events experienced by local residents, in this case CVD, and conducting detailed analyses of the forms of care sought, were the focus of this study. In addition to combining all forms of contact between patients and the various medical systems available in the study area, this analysis distinguishes between forms of internal and external care. Slikkerveer (1990) describes the different forms of internal and external care, where internal care refers to the practice of 'self-care', which is defined as an action. It is generally carried out by the patient himself, covering all forms of contact between the patient and the provider of non-professional health services, such as family members or friends, who have been established in such a way as to receive treatment. In contrast, external care refers to the practice of individuals, who, as noted by Slikkerveer (1990: 225): "*actually leave their homes and seek some form of external medical care in one of the available medical systems*". External care is associated with intermediaries for professional nursing providers, which have been determined by Eisenberg (1993: 2) as: "*someone who gives care or gives advice and is paid for his services".*

The term 'health behaviour' refers to actions taken by people without disease with a view to determine or strengthen their health status; it hereby refers to disease prevention and health promotion activities, as well as consultation. The utilisation behaviour of nursing services includes all actions taken by individuals in the community aimed at health recovery (*cf.* Suchman 1963; Foster & Anderson 1978; Kleinman 1978; 1980; Helman 1981; Foster 1983; Slikkerveer 1990). Slikkerveer (1990: 2) states that: '*Health behaviour, illness behaviour, and the use of health services as important elements in this process have become major problems in the study of medicine, nursing, culture, and society'*. Many researchers advocate new and more realistic strategies for studying diverse patterns of behaviour in the use of health services in an area through the approach of the concept of medical pluralism (*cf.* Slikkerveer 1990; Leurs 2010; Djen Amar 2010; Ambaretnani 2012; Chirangi 2013; Aiglsperger 2014; De Bekker 2021). In other words, medical pluralism is a concept of utilising transcultural nursing, which refers to the use of different nursing sub-systems for the same disease or disorder. Initially this concept was introduced as 'transcultural health care utilisation' in the Horn of Africa by Slikkerveer (1990) and has been operationalised and expanded to meet the rather complex configuration of nursing institutions and organisations in the study area. This study focuses on the pattern of nursing utilisation behaviour by the elderly with CVD of the plural nursing system in the Sumedang research area, based on a multidimensional perspective which is essential for building the analytical model of the research.

This study extends a community-based research approach to analyse transcultural behaviour patterns of the elderly with CVD, which incorporates all forms of nursing of the plural nursing system in an effort to cope with the illness episodes of CVD. In the next Paragraph, the components of the Plural Nursing Systems will be discussed as the focus of this study.

### 2.3.1 Traditional Nursing Institutions of the Elderly with CVD

As explained earlier in this Chapter, the concept of traditional medicine is closely related to the idea of the Indigenous Knowledge System (IKS) as underscored by Warren, Slikkerveer & Brokensha (1995) as unique knowledge rooted in the culture of society that differs from the international knowledge system generated through a network of research institutions. In the field of health, the Indigenous Knowledge System has been referred to as the Indigenous Medical Knowledge System and has been defined as an empirical and sacred framework for understanding health and healing, which includes the special cosmovision and order which is felt in nature (*cf.* WHO 1993; Warren,

Slikkerveer & Brokensha 1995; Balick & Cox 1996; Hanepen 1997; Bodeker 1999; WHO 2002a in Aiglsperger 2014).

According to Slikkerveer (2006: 2): *'Traditional medicine in terms of a body that is bound to a culture of authentic medical knowledge, beliefs, and practices has provided the main plant-based foundation for many ethnomedical systems that existed long before "scientific" development or cosmopolitan medicine.*' Overall, traditional medicine is embedded in the history, attitudes and personal philosophies of certain communities and combines knowledge and practices of various medical systems (*cf.* WHO 2002a). Until the beginning of the 19th century, most medicines could be defined as traditional medicine which refers to practice; this is largely culture-specific and existed long before the application of modern scientific experiments and statistical validation to medical theories (*cf.* Bannerman 1978; 1983). As WHO (2012) explains: *'Traditional medicine is the total amount of knowledge, skills and practice based on theories, beliefs and experiences from different cultures, whether they can be explained or not, used in nursing and in the prevention, diagnosis, improvement or treatment of physical illness and mentality.'* The traditional medical practice which is the main focus of ethnomedicine is basically interpreted as beliefs and practices with respect to diseases which are the result of the development of indigenous cultures and explicitly derived from the conceptual framework of modern medicine (*cf.* Hughes in Foster 1978).

Traditional herbal medicine, known as *jamu* is based on concoctions derived from flora and fauna which are mixed and used as medicine, both to maintain health and as an antidote to disease. Knowledge of these ingredients is inherited from generation to generation based on the results of experience and not on scientific explanation. In this case, the use of herbal plants and herbal concoctions in the form of herbal medicine is part of health practices in Indonesian society. Quoting De Padua (1999) and Slikkerveer (2006), we can distinguish the following types of herbal medicines: (1) traditional medicine, which refers to the utilisation of indigenous MAC plants in their country of origin; (2) herbal medicine, which refers to the planting and preparation of indigenous MAC plants for external sales; and (3) pharmaceutical drugs, which refer to indigenous MAC plants which could provide certain active components in pharmaceutical products. On the other hand, Zhang (1998) defines 'vegetable' or 'herbal medicine' as any plant, which is an herb, bush, tree or fungus, is used alone or in combination with other plants, for the purposes of health recovery and maintenance. In general, the concept of herbal medicine includes raw and processed plant ingredients with therapeutic or other human health benefits, as well as special herbal products.

The concept, however, does not include plant material which has been identified as an active component through modern scientific techniques and has been isolated or synthesized as a chemical (*cf.* Zhang 1998; WHO 2002a). Slikkerveer (2003; 2006) also mentioned that natural and environmental alternative philosophies and original health and healing practices, which generally underlie the application of herbal medicine, also contribute to the increasing popularity of the global vegetable medicines throughout the world today. Known as 'holistic herbalism', the use of herbal medicine rebuilds the relationship between humans and the natural environment, because it has long provided the basis for medical care and enables treatment methods within the social and spiritual environment of patients (*cf.* Slikkerveer 2006). Foster & Anderson (1987), Bodeker (1999), Agung (2005) and Leurs (2010) observe that traditional medical systems generally use the concept of holistic health, which refers to a balanced relationship between individuals and nature, the social and spiritual environment, where illness is considered as a result of imbalances in relationships.

The practice of traditional medicine can be understood as the practice of prevention, treatment, and healing practiced by a group of citizens who have the expertise to use traditional ingredients, without going through formal educational institutions of anthropologists and ethnologists, paying attention to aspects related to the practice of shamanism, beliefs and so on, as has been described by them (*cf.* Ulain 1999). As Brelet (1983) argues, traditional medical systems usually include forms of self-medication or forms of care which are managed by members of the non-professional community.

In addition, the traditional medical system embodies the activities of caring for various traditional health service providers, such as traditional healers, herbalists, bone regulators and divine physicians (*cf.* Foster & Anderson 1987; WHO 2002a). Traditional medicine, whether it is formulated by the

user or through a care practitioner (*dukun*) in the initial observation, is the first choice before using the services of medical personnel, as well as being the final choice after failing to use medical services. Not infrequently, the choice to use the services of a shaman invites doubt, when related to the religion/belief held by the user (*cf.* Ulain 1999; Fatimah and Indrawasih 2010). The practice of traditional medicine and the repertoire of traditional medicines is an area of research which has not been widely revealed, so that socio-cultural studies need to be conducted in an interdisciplinary mode.

Based on Government Regulation No. 103 of 2014, concerning Traditional Health Services in Indonesia, Traditional Health Services integration consists of three categories, namely: 1) traditional health services integration by using skills; 2) traditional health services integration using herbs; and 3) traditional health services integration by using a combination of skills and ingredients in a unified traditional health system. In traditional health services integration which uses skills, one can use manual techniques in the form of manipulation and movement techniques from one or several parts of the body; energy therapy techniques which are treatments using energy fields both from outside and from within the body itself; and/or sports therapy techniques by utilising the ability of the mind to improve bodily functions.

As regards traditional health services integration which uses herbs, one can use natural ingredients, namely in the form of plants, animal ingredients, mineral materials, *sarian* ('Galenic') preparations, or mixtures of these materials. The integration of traditional health services has to have in common harmony and compatibility, which is a scientific unity carried out in a traditional health system in the provision of complementary traditional health services to patients/clients (*cf.* Aswani 2016). However, the concept of the integration of traditional health services is still a major subject of the current debate.

It is well known that Complentary Alternative Medicine (CAM) is also used, according to the WHO (2002a), to refer to a broad set of nursing practices which are not part of the country's own tradition, or are not integrated into its dominant nursing system. In the same way, Slikkerveer (2003) notes that CAM combines foreign philosophies about health and healing, therapy and professionals, which provide alternatives to modern medical doctrines. Ernst & Dixon (2004: 308) also define '*complementary medicine as: diagnosis, treatment and/or prevention that complements general treatment by contributing to the same whole, by meeting demands that are not met by orthodoxy or by diversifying the conceptual framework of a dru*g'. The WHO (2002a) claims that CAM is largely based on a holistic approach to medicine, which emphasizes a person's health in general, rather than disease alone. In some WHO literature, it is mentioned that Traditional Medicine or traditional health services have the same meaning as Complementary and Alternative Medicine (CAM). Although the official WHO outline (2002a) reveals a general tendency to combine the concept of CAM with the concept of Traditional Medicine (TM), most scientists disagree because it generally refers to medical practices which are outside the scope of *adat* and international knowledge systems (*cf.* Aiglsperger 2014).

Accordingly, traditional medicine is an institution in society, not merely a curative effort for a disease, but also including disease prevention and health promotion efforts in the form of different forms of knowledge, practices and skills. Since this study focuses on the role of the traditional nursing institutions in the care of the elderly with CVD at the community level, the institutional aspect of the traditional nursing system will be expressed in the concept of the Traditional Nursing Institutions (TNI). Lately, these traditional nursing institutions have increasingly received attention from various parties. Several advertisements which offer *jamu* and traditional medical practices with various advantages are provided in print or electronic media, billboards etc., often seen in public places. Traditional nursing institutions are now popular, often chosen by the community, and getting attention from various groups for several reasons, including the following:

*Firstly*, people feel that traditional nursing institutions are based on natural ingredients of MAC plants, which are cheaper and easier to obtain as raw materials when these plants are grown by the people themselves. In general, one plant has more pharmacological components, rendering them beneficial for the treatment of degenerative and metabolic diseases;

*Secondly*, the success factor of the *dukun* (‘traditional healers’) to provide herbal medicine and recipes often proves to be effective with hardly any side effects;

*Thirdly*, there is the difficulty of the *dukun* (‘traditional healers’) in obtaining raw herbal materials which is causing a scarcity of *jamu* in the market, thereby encouraging competent parties in health services to look at the use of traditional herbs and recipes as alternative ingredients/medicines;

*Fourthly*, there is dissatisfaction due to the failure to use modern therapy on the one hand and the success of alternative medicine on the other;

*Fifthly*, there is a philosophical conformity with spiritual views, beliefs or values of the client regarding the meaning and nature of health and disease;

*Sixthly*, there is a need for personal control, where the client is given autonomy to decide the right nursing for himself; and finally,

*Seventhly*, there is a readiness among a number of medical officers (doctors, pharmacists and nurses) to use traditional herbs. There are even those who combine modern medical treatments and traditional herbs/therapies for special cases (*cf.* Astin 1998 in Aiglsperger 2014; Ulain 1999; Fatimah & Indrawasih 2010).

### 2.3.2 Transitional Nursing Institutions of the Elderly with CVD

In the concept of the Plural Nursing Systems, there is no rigid differentiation between a traditional nursing institution and a modern nursing organisation, but the transitional process which has developed from their interaction renders the plural nursing systems to encompass various systems. In such pluralistic configuration, the transitional components are defined as ‘transitional nursing organisations’ These organisations are cterised by the commercil sale of ’Over-the-Counter’ (OTC) drugs, which include not only medicines without prescription, but also illegal drugs.sold by commercial drug vendors.

Figueiras (2001: 223) confirms that: ‘[*drug*] *therapy is one of the most widely used treatment methods in primary care.*' Thus, people often buy OTC drugs without a prescription, often based on their experience with medicines from modern nursing organisations for the same symptoms of the disease. It often happens since it is more economical than paying higher prices for the services of modern health practitioners. Aiglsperger (2014) and Sleath (2001) mention that OTC drugs are largely used for 'self-medication' or ‘self-care practices’, often performed by the patients themselves. In this context, Hughes (2003: 1) states that they are: *'as a management of minor ailments using pharmaceutical products that are available without a prescription'.* The availability of such drugs is quite abundant (*cf.* Berry 2004; Bond 2004; Wazaify 2005; and Lynch & Berry 2007).

However, the provision of OTC drugs often encourages the public to use drugs incorrectly. The abuse of OTC drugs can be related to such factors as non-compliance with instructions, lack of communication patterns between patients and doctors, and lack of patient control in the general practice of self-medication with inappropriate doses or use over long periods of time and with simultaneous intake of more than one drug (*cf.* Tzimis & Kafatos 1999; Hughes 2003; Berry 2004; Bond 2004; Filipetto 2008). Figueiras (2001) and Filipetto (2008) state that abuse of OTC drugs and the habit of using them regularly have caused a number of problems. It can mask symptoms of the disease, increase misdiagnosis, cause delays in treating serious medical conditions, increase the risk of adverse drug reactions, increase disease caused by drugs, produce bacterial resistance and parasitic immunity, foster a feeling of 'chemophobia' due to negative side effects among clients, and impose financial burdens on community members who cannot afford to pay for medicines.

### 2.3.3 Modern Nursing Organisations of the Elderly with CVD

Modern Nursing Organisations (MNO) are also known as' scientific', or Western' or 'cosmopolitan' organisations, originating in the West in most globally-oriented countries, based on scientific principles, scientific education and training, and developing the application of modern pharmaceutical drugs, most of which were developed in experimental research in laboratories and research universities (*cf.* Aiglsperger 2014).

As Slikkerveer (1982: 1863) notes: '[*The modern medical system] includes elements of scientific medicine originating in Europe in the late middle ages and eventually forming a cosmopolitan medical system throughout the world'.* Modern medical science as applied in health science, biomedical research and medical technology aims to diagnose and treat disease. Modern treatment and surgical procedures are common practice in modern health care. Medical doctors diagnose the patient's symptoms using clinical observations to determine the disease. The interaction between the doctor and the patient begins with a review of the patient's medical history, followed by an interview and physical examination. To get more detailed information about patient-specific symptoms, doctors can order clinical tests (such as biopsies) or prescribe pharmaceutical drugs or other therapies (*cf.* Ambaretnani 2009). In contrast to traditional nursing institutions, modern nursing organisations are dominated by forms of nursing which involve consultations with modern health service providers. Modern nursing organisations are based on a system of Western medical knowledge, technology and medicine, which is dominant among modern doctors, because such knowledge is generally given greater validity than the knowledge of other medical personnel, such as nurses or medical auxiliary staff, as well as the 'lay' medical knowledge of patients (*cf.* Hahn 1995). Modern healing practices generally involve the following elements:

a) ideas about pathogens which refer to natural phenomena, being the cause of disease;

b) pathology, which discusses the nature of the disease;

c) a focus on curative care directed at the control or elimination of pathological conditions;

d) nosology based on the International Classification of Diseases designed by WHO; and

e) a practice which is divided into many specialisations (*cf.* Hahn 1995).

In general, modern nursing organisations follow the Primary Nursing Model, generally implemented when a single nurse is identified as the point of contact to patients during their illness episode. This model was introduced by nurses working under a licensed nurse practitioner in a team at the University of Minnesota in 1969. In this model, teamwork is critical to the primary nursing care delivery system. A culture of "helpfulness" based on a shared commitment to all patients and team members is implemented to achieve quality care (*cf.* Ferrura, *et al.* 2016).

Modern types of nursing organisations in Indonesia include the nursing services at the *puskesmas*, hospitals, clinics, medical centers, the maternity and midwife clinics, and so forth. The treatment methods used in modern nursing organisations are mostly in the form of recommendations offered by modern nursing providers in patients' environmental and social activities in the form of consultations, including the recording of their medical history and patient morbidity data, physical examination and statistical measurements, with a view to support subsequent diagnosis and treatment (*cf.* Canary 1983).