

## *Conceptual Barriers to Palliative Care and Enlightenment From Chuang-tze's Thoughts*

JUNXIANG LIU, TIANYU ZHANG, YIYAO LIAN, FEI LI, and XIAOHONG NING

**Abstract:** This paper claims that palliative care (PC) is a suitable approach for offering comprehensive support to patients with life-threatening illness and unavoidable asthenia, to enhance their quality of life in aging and chronic illness. There are however some conceptual barriers to accessing that care on the Chinese Mainland: (1) Death-denying culture and society; (2) Misguidance and malpractice derived from the biomedical model; (3) Prejudice against PC and certain deviant understandings of filial piety culture. To counter these obstacles, the study introduces the philosophy of Chinese Taoist Chuang-tze to enlighten the public from ignorance and remove some illusions about death and dying; inspire people to face and accept illness and death calmly, and keep harmony and inner peace of mind to alleviate suffering, with the aim of providing wisdom and a shift of attitude toward life and death. Chuang-tze's thoughts are consistent with the provision of palliative care, and to a certain degree, can promote its acceptability and delivery, and the conception of good death in practice.

**Keywords:** Palliative care; Conceptual barriers; Chuang-tze; Life; Death; 'Tao'

### Introduction

Populations are living longer and aging rapidly worldwide. The pattern of disease prevalence has changed, with more people dying from chronic, incurable, and debilitating illnesses.<sup>1</sup> The question of how to alleviate pain and suffering in these patients and improve the quality of their end of life has become increasingly pertinent in many countries around the world.

Unlike curative treatment and life-prolonging interventions, palliative care (PC) aims to provide patients with relief from physical, psychological, and spiritual suffering caused by their conditions, from the time of diagnosis to the end of life.<sup>2</sup> Palliative care aims to offer a comprehensive support system to enhance patients' quality of life and help families and caregivers cope with stress and bereavement.<sup>3</sup> According to the WHO definition, this model of care is premised upon the view that death and dying are natural and acceptable parts of life, and that the goal of palliation is to help patients lead active and productive lives despite their terminal condition. In particular, the care includes (1) somatic relief from pain and other distressing clinical symptoms early in the course of illness, in conjunction with other therapies, such as chemotherapy or radiation therapy; and (2) psychological and spiritual aspects of care, offering a support system to the patients and family members throughout the course of disease. While these are not new dimensions in our conception of a person's well-being, they do present new challenges in healthcare systems. Palliative care places strong emphasis on internal aspects of illness, such as how patients experience and express pain, anxiety, depression, and distress.<sup>4</sup> This means that patients' beliefs about death, dying, and the meaning of life and of suffering—all of which are shaped by their cultural experiences and contexts—play a seminal role in the care of these patients.<sup>5</sup>

Palliative care has deep connections with the biopsychosocial model of care. Proposed by George L. Engel, the biopsychosocial model aims to provide holistic

care to patients throughout their lifespan.<sup>6</sup> Researches have demonstrated that this approach to patient care has benefits of reduced mortality. Among patients with metastatic non-small-cell lung cancer, early assignment to palliative care led to significant improvements in both quality of life and mood, less aggressive care at the end of life, and longer survival as compared to those receiving standard care<sup>7</sup>.

Development of palliative care delivery has become a focus of interest in many countries in recent years, in part due to the positive outcomes it is able to provide.<sup>8</sup> However, access remains a major issue for most of the world's population: it is estimated that in developing countries, 78 percent of adults in need of palliative care do not have access to it, and the pediatric population is similar in this respect.<sup>9,10</sup> The purpose of this study is to explore and explicate some of the conceptual barriers to the provision of palliative care that stem from socio-cultural contexts, with particular focus on Eastern cultures. The second part of this paper discusses Chuang-tze's ontological and normative views with regard to human existence, and argues that his philosophical position, which focuses on the unity between individual and universal principles, provides an alternative to the prevailing attitudes toward death and dying in many cultures, and helps to clear some of the conceptual obstacles to the development and flourishing of holistic approaches to end-of-life care.

## **Conceptual Barriers to Palliative Care**

### *Death-Denying Culture and Society*

In China and other Asian regions, death remains a taboo subject.<sup>11</sup> Most Chinese families will not discuss issues of death and dying for fear of invoking misfortune. These topics are considered a sign of an abandonment of hope, and are believed to predict worse outcome in the patient.<sup>12</sup>

In the second half of the twentieth century, life expectancy has increased considerably, and death has become increasingly associated with chronic diseases. Gradual decline has become the norm, and modern medicine often leaves us with the impression that life can be sustained almost indefinitely, and death—the ultimate enemy—can be staved off for a long time. Along with the willingness to assign increasingly higher values to life years, death has been marginalized at the expense of the pursuit of longevity.<sup>13</sup>

### *Malpractice Instigated by the Biomedical Model*

The biomedical model has dominated the world of medicine since the age of mechanistic philosophy, and it still has powerful impact today. In the words of Engle, in the biomedical model, “disease is defined in terms of somatic parameters and due to known or unknown natural causes; the goal of medicine is to eliminate the causes and result in cure or improvement in individual patients. The biomedical approach to disease has been successful beyond all expectations, but at a cost.”<sup>14</sup>

The cost that Engle speaks of is two-fold. First, because the biomedical model conceptualizes the human body as a complex machine with a multitude of parts and causes, the expectation is that the doctor can, in theory, cure all diseases by making modifications to parts of the system. Death is therefore considered a failure of

treatment, or a result of human error.<sup>15</sup> These illusions lead to many undesirable practices of overdiagnosis and overtreatment, and doctors work in an environment that favors an aggressive interventionist approach.<sup>16</sup> Second, the biomedical model's definition of health is also limited by its premises. By focusing on physiological parameters, it leaves little room for psychological and spiritual dimensions of illness within its framework. These aspects are not considered an integral part of health or wellbeing by the medical world, and physicians need not be concerned with that which lies outside medicine's responsibility and authority.<sup>17</sup> Consequently, in the eyes of most patients, the hospital represents a highly interventive environment, incompatible with spiritual care.<sup>18</sup>

Yet many studies have shown that psychological and spiritual dimensions are crucial in one's experience of pain and suffering.<sup>19</sup> Meaning-making can affect the patients' pain experience, decrease inflammation, reduce stress on the body, and improve the ability to cope with pain.<sup>20</sup> Factors that have been demonstrated to influence the pain experience include negative mood, anxiety, the amount of social support, sense of self-efficacy and control, and adaptive coping strategies.<sup>21</sup> Even though these factors do not alter the presence of physical pain, they do change the perception of pain. Many of these factors depend on a patient's metacognitive attitudes toward the nature of suffering, peace, and ends. Therefore, there is a *prima facie* case to be made about the need for further philosophical reflection on what constitutes a good life and, by extension, a good death.

#### *Prejudice Against Palliative Care and Certain Deviant Understandings of Filial Piety Culture*

Because the approach to PC is distinctively unlike the highly interventive approaches employed everywhere in medicine, many people perceive palliative care service as a passive process of letting die. Some may even associate it with the practice of euthanasia, which goes against the mainstream conception of filial duty in eastern philosophical thought influenced by Confucianism.<sup>22</sup> Confucian filial piety requires offspring to try their best to support and care for their elderly, especially when they are sick. Leaving the elderly unattended is regarded as unfilial in a Confucian society, let alone leaving them untreated while ill.<sup>23</sup> Modern medical technology has vastly expanded the means available to care for the sick patient, creating ever-higher expectations about what filial duty requires at the end of a loved one's life. This leads to disputes about how to deal with the end of life of the elderly according to filial piety. Some people think following the natural life course and relieving the suffering of parents is filial, while others believe that one should treat or sustain parents' lives at any cost. This confusion results in questionable decisions regarding the patient at the end of life, including futile invasive treatments, high medical costs, and disregard for the wishes of the dying.<sup>24</sup>

#### **Chuang-tze's Thoughts of Life and Death**

Taoism, one of the most influential thought traditions in China, provides an alternative philosophical attitude regarding the end of life. We focus below on Chuang-tze's thoughts in particular, as he is a representative sage of Taoism, second only to Lao-Tzu.

*The Ontological Understanding of Life and Death*

In Chuang-tze's view, Ch'i ( Qi/vital energy) is a natural substance and present in the composition of all creatures, including human beings. "The birth of man is the birth of convergence of the Ch'i, which is in turn forms life. The breaking-up of the vital energy causes death."<sup>25</sup> Ch'i is constituted by the interaction of two opposite vital energies, which is also the cause of change. The normative position derived from this view of life's origin is that a healthy life is one in which the forces of Yin and Yang are balanced. If one vital energy becomes too dominant, the harmony will be broken and illness in the body and mind will result. On this view, life and death are simply different states of Ch'i: they belong in the same genus and are merely temporary, relative states of Ch'i.

*The Natural Law of Life and Death Cycle — "Tao"*

According to Chuang-tze, the change of Ch'i follows 'Tao,' which is the totality of the spontaneity, instinct, and freedom of all things in the universe. 'Tao' is the ultimate governing principle of the universe and literally means the 'path' or 'way' that every creature must follow.<sup>26</sup> It embodies both 'being' and 'nonbeing' in a constant, cyclical, and evolutionary flux of production and destruction. The world and human life, therefore, far from being permanent, are in constant motion and subject to changes of 'Tao.' Human life is conceived as a natural process that traverses from nonbeing to being, birth, aging, illness and, eventually, a return to nonbeing. The cyclical nature of life is like the changing of seasons and the succession of day and night: they all follow the universal principle of change, and are not subject to inference from men.

*Taoist Attitudes Toward Life and Death*

Chuang-tze regards death as an inevitable event, and not an inauspicious one. To him, because of the overarching principle that manifests itself in the natural world, men should be conditioned to its presence, and take on a philosophical attitude toward life and death. It is unnecessary to rejoice in beginning of life and to mourn at its end. Experiencing the death of his wife, Chuang-tze said; "when she just died, how could I refrain from sorrow? Soon, however, I examined the matter from the very beginning. Before she was born she had no life, no physical form, nor even vital energy at all. Amid what was opaque and obscure, there was then her substance, then her form, then her life. Now by a further transformation, she has died. The whole process is like the sequence of the four seasons. While she is thus lying in the great mansion of the universe, for me to go about weeping and wailing would be to proclaim myself ignorant of the natural law. Therefore I stop mourning."<sup>27</sup>

Chuang-tze's ideal image is the 'true man,' who is pleased to accept whatever comes to him in life. The true man does not assign additional human significance to life and death beyond the universal principle of change, and lives truly as part of nature. This is what is meant by "not impairing Tao with the mind and not assisting the heaven with human efforts."<sup>28</sup>

Conceived as the natural progression of 'Tao,' death in itself is positive on Chuang-tze's account: "The great earth endows me with my physical form, makes me toil to sustain my life, gives me ease to idle away my old age, and offers me a resting place

when I die. Therefore, to live is something good and to die is also something good."<sup>29</sup> What is bad, then, is to fall prey to any emotional bondage that has a tendency to hinder the natural order.

### *How to Preserve Health and Life*

Chuang-tze's conception of what constitutes a good life also provides a perspective on goals at the end of life, and coincides with the biopsychosocial model of care.

In Chuang-tze's metaphysics, life is composed of body and mind/spirit. Preserving the physical body therefore constitutes only a partial sustenance of life; attention also needs to be paid to freedom and tranquility of mind as well as the well-being of spirit. Most people are only concerned with the physical body and think that they can preserve life by nourishing the physical form. In Chuang-tze's view that is not enough, and reveals an ignorance of the essence of life-cultivation. Chuang-tze focused self-cultivation on man's mind and spirit, rather than on the body.

There is a classical story which illustrates Chuang-tze's view of what constitutes self-cultivation and how to keep good health. The lord Wenhui marveled at the skill of a butcher and asked him the secret of his perfect achievements. The butcher responded, "When I first began to carve a bullock, I saw nothing but the whole bullock. Three years later, I no longer saw the bullock as a whole but in parts. Now I work on it by intuition and do not look at it with my eyes at all. I suspend my visual organs while my intuition goes its own way. In accordance with the natural grain, I cleave along main seams and thrust the knife into big cavities. Following the natural structure of the bullock, I never touch veins or tendons, much less big bones! There are crevices between the joints and the edge of my knife is very thin. There is plenty of room for it to pass through. That is why the edge of my knife is still as sharp as if it had just come from the whetstone, while an ordinary butcher needs to change his knife once a year or even once a month because they cut into the flesh or hack at the bones. Such arbitrary actions go against, rather than with, the nature of things."<sup>30</sup>

This inspiring story reveals the secret of preserving life. We should take actions that are in accord with the natural 'Tao,' rather than controlling or conquering something as if it were an opponent. We should not be distracted by all kinds of ephemera and irrelevancies, such as profit and gain, reputation and fame, aims and purposes, ego and other worldly affairs; we should concentrate on what we do in order to be free from worry and care, anxiety and fear, and to finally stop getting in the way of our achievements. This is the same as the essentials for keeping good health by avoiding any thought, trickery, or delusion that afflicts the spirit and leads to exhaustion. Chuang-tze emphasizes that keeping man's mind pure and quiet, and being indifferent to self and external things, can cultivate life and health authentically. Only a wholesome physical form and sufficient vital energy will enable a man to conform with nature and have a good quality of life.

### **What Chuang-tze's Thoughts Tell Us About Palliative Care**

While few question the inevitability of death, many are caught up in a philosophy of healthcare that promotes death denial at each step. Chuang-tze's philosophy explicitly affirms life's limit, regards dying as a normal process, and instructs us to neither hasten nor seek to postpone death. Taking account of death, rather than focusing solely on a filial duty to sustain life, has several practical implications.

*Facing and Accepting Death as a Natural Law*

Chuang-tze's naturalistic cosmology is helpful for reminding people that anything with shape will crumble away; the world and our physical body, far from being permanent, are in constant motion and subject to change.<sup>31</sup> It hopes to inspire people to face death squarely rather than avoid it or cover it up. This shift in our attitude toward death is an important starting point of our ability to provide palliative care for the benefit of patients and the dying.

In Asian cultures, it is customary for the family to conceal any negative diagnosis from the terminally ill, for fear of exacerbating their condition. Consequently, patients often do not get an opportunity to express their wishes and concerns about themselves and their affairs. This practice, while usually accepted by both sides of the well-intended lie, can sometimes impede patient care and leave behind regrets and unfinished affairs. Constructing a collective illusion of hope amplifies the potential benefits of treatments, making invasive procedures and risky interventions more acceptable than they ought to be. A more comprehensive metacognitive belief about illness can serve to make conversations about end-of-life care planning more acceptable, and improve communication among the patient, their family, and the treating team of healthcare workers. Opening up this conversation at the level of public discourse can help us focus on the needs of terminally ill patients, improving the quality of care and access to resources, both biomedical and psychosocial.

*Self-Cultivation and Holistic Care Implications*

As mentioned, disease and suffering cause not only physical pains but also many negative emotions and burdens, such as sadness, shame, anger, disgust, annoyance, confusion, helplessness; and hopelessness, fear of death and loss of control over one's own body, life, and many external factors, all of which present strange and huge changes to the patient. In this sense, disease and dying can be understood as a disturbance of the familiar relationship with one's internal organism, a disruption of the connectedness to the existential moment, to self, to others (families and workplaces), to nature, and to the significant or sacred.<sup>32</sup> It is because the patients cannot or will not accept the great changes, the withering of the ego, the loss of preexisting relationships, and the failure of patterns of coping that have been in control, that they experience psychological and spiritual suffering. Obviously, the biopsychosocial model and comprehensive care of PC is based on the concept of the person as a being-in-relationship.<sup>33</sup>

The approach to alleviating or eliminating psychological and spiritual suffering that Chuang-tze proposed is to follow and accept natural changes naturally and peacefully with an indifference to external things. According to the Taoist, life is a natural course that suggests that people should follow their fate to seek harmony with self and nature rather than try to change or struggle against it. Declining and dying in old age is a part of a natural process, rather than an enemy that we should seek to combat by medical technologies. People should accept and appreciate death and dying as a rest or a return to one's origin, enjoy harmony and inner peace of mind, and avoid attempts to disrupt the flow of the cycle of nature. Their families and relatives should also accept these changes, and can thus better cope with bereavement and lamentation. His philosophy contributes some wisdom about appropriate life images and attitudes to death that can help patients to adjust to

getting old and frail, and to prepare to say goodbye to their families, friends, and the world. His ideal of self-cultivation attaches importance to the body and the mind, especially the spiritual peace and quietness that match and support the idea of palliative care closely, and help to foster a more holistic consideration of the appropriateness of human death.

In many people's opinion, the proper attitude to life and death is passive, pessimistic, and unmerciful. On the contrary, the meaning-making attitude toward death can have positive dimensions as well. From Chuang-tze's perspective, because we cannot control and predict the coming of death, we should follow the natural process. Worry and too much anxiety about dying and death will in turn harm the limited and treasured remaining life, as well as that of family members and friends. These artificial and negative emotions, just like webbed toes and double fingers, are unnatural, useless, and harmful additions to the natural.<sup>34</sup> The main idea of self-cultivation is that following what is of nature and appreciating what happens peacefully is the source of all happiness and goodness, while what is merely human and arbitrary will cause harm and evilness. No wonder that when his wife died, Chuang-tze stopped crying and sang a song. However, the philosophy does not provide a concrete and practical method for improving or caring for the psychological burden in the clinical setting.

#### *The Essence of Palliative Care and Following the "Tao"*

According to its definition and the above analysis, PC does not mean that we just wait and leave the patients alone. It just opposes interventions that cause unnecessary sufferings and harm to the patients. PC is consistent with 'Tao,' and Chuang-tze rejects too much artificial meaning and unnatural actions which were the source of all pain and evil in human life and the world.

How does one distinguish between natural and unnatural actions? Chuang-tze presented a metaphor to explain that the duck's legs are short and the crane's legs are long, but if we try to lengthen or shorten them, the duck and the crane will suffer pain and grief. Therefore, we cannot amputate what is by nature long, nor lengthen what is by nature short<sup>35</sup>. Thus, "the natural refers to flowing the way of Tao and the unnatural is the man's attempt to force his own will upon Tao. All beings may have a different nature and natural abilities but when they have a full and free exercise of their natural ability, they will be happy and healthy. If one overacts, it becomes harmful rather than good."<sup>36</sup>

This doesn't mean that Chuang-tze recommends that we should do nothing at all. If a treatment can help patients restore their natural ability and function to some extent, such as fracture reduction, that can be accepted. If the treatment violates the natural process and is unable to help recover the natural ability of the body on its own, it would be rejected as arbitrary, and against naturalness and spontaneity. The permanent provision of life-sustaining machinery for dying or patients in a persistent vegetative state runs that risk. In case of patients with life-threatening illness, if the doctors and caregivers provide relief from pain and other distressing symptoms, offer a support system to help patients live as actively as possible until death and improve their quality of life, these are natural and thus justifiable interventions according to 'Tao.' If the medical staff use a respirator and nasal feeding indefinitely, or if overtreatment causes unbearable suffering such that the patients prefer to die rather than prolong their life, the intervention is arbitrary and harmful, even with

good intentions. The removal of such life-supporting measures from the patients would be recommended and ethical. Death is neither a failure of treatment nor caused by human errors, but a natural and inevitable event. From this point of view, while 'Tao' acknowledges the premise that life has limits, following the 'Tao' is not to leave the patients alone, but to help them finish the last journey as peacefully and comfortably as possible. Thus a Taoist is willing to support palliative care, and to let nature take its course at the terminal stage.

## Conclusion

Although death has an universal incidence—all of us will eventually die, regardless of all the advances in prevention and curative treatment—there is much perplexity, confusion and even denial about end-of-life issues and death amongst most people. The misperceptions and conceptual obstacles have a huge impact on the dying and their family members, and can result in misconduct and arbitrary interventions for the dying that result in additional physical pain, psychological and spiritual suffering, and heavy financial burdens for the dying and their families. This paper seeks to provide another understanding, drawing wisdom from Chuang-tze and Taoism to help dispel biases toward palliative care, reflecting upon and reframing the attitudes toward life and death to a degree that can promote good death.

## Notes

1. De LL, Pastrana T. Opportunities for palliative care in public health. *Annual Review of Public Health* 2016;37(1):357.
2. Adler ED, Goldfinger JZ, Kalman J, Park ME, Meier DE. Palliative care in the treatment of advanced heart failure. *Circulation* 2009;120(25):2597.
3. Sepúlveda C, Marlin A, Yoshida T, Ullrich A. Palliative Care: The World Health Organization's global perspective. *Journal of Pain & Symptom Management* 2002;24(2):91–6.
4. Adler RH. Engel's biopsychosocial model is still relevant today. *Journal of Psychosomatic Research* 2009;67(6):607–11.
5. Hsu C-Y, O'Connor M, Lee S. Understandings of death and dying for people of Chinese origin. *Death Studies* 2009;33(2):153–74.
6. Novy DM, Aigner CJ. The biopsychosocial model in cancer pain. *Current Opinion in Supportive & Palliative Care* 2014;8(2):117.
7. Temel JS, Greer JA, Muzikansky A, Gallagher ER, Admane S, Jackson VA, *et al.* Early palliative care for patients with metastatic non-small-cell lung cancer. *Chinese Journal of Lung Cancer* 2010;363(9):733.
8. Clark D. From margins to centre: A review of the history of palliative care in cancer. *Lancet Oncology* 2007;8(5):430–8.
9. Connor SR, Bermedo MCS. *Global atlas of palliative care at the end of life*. World Health Organization; 2014; available at [https://www.who.int/nmh/Global\\_Atlas\\_of\\_Palliative\\_Care.pdf](https://www.who.int/nmh/Global_Atlas_of_Palliative_Care.pdf) (last accessed 3 Mar 2020)
10. Caruso AB, Howard SC, Baker JN, Ribeiro RC, Lam CG. Reported availability and gaps of pediatric palliative care in low- and middle-income countries: A systematic review of published data. *Journal of Palliative Medicine* 2014;17(12):1369–83.
11. Barclay JS, Blackhall LJ, Tulsy JA. Communication strategies and cultural issues in the delivery of bad news. *Journal of Palliative Medicine* 2007;10(4):958–77.
12. See note 5, Hsu *et al.* 2009:153–74.
13. Higginson IJ, Koffman J. Public health and palliative care. *Clinics in Geriatric Medicine* 2015;21(1):45–55.
14. Engel GL. The need for a new medical model: A challenge for biomedicine. *Science* 1977;196(4286):129–36.
15. Wu Y, Li L, Su H, Yao X, Wen M. Hospice and palliative care: development and challenges in China. *Clinical Journal of Oncology Nursing* 2016;20(1):E16.

16. Weinstein MC, Skinner JA. Comparative effectiveness and health care spending--implications for reform. *New England Journal of Medicine* 2010;362(19):1845.
17. Cormier JN, Askew RL. Assessment of patient-reported outcomes in patients with melanoma. *Surgical Oncology Clinics of North America* 2011;20(1):201–13.
18. Pujol N, Jobin G, Beloucif S. 'Spiritual care is not the hospital's business': A qualitative study on the perspectives of patients about the integration of spirituality in healthcare settings. *Journal of Medical Ethics* 2016;42(11):medethics-2016–103565.
19. Wachholtz AB, Fitch CE, Makowski S, Tjia J. A comprehensive approach to the patient at end of life: assessment of multidimensional suffering. *Southern Medical Journal* 2016;109(4):200–6.
20. Dezutter J, Luyckx K, Wachholtz A. Meaning in life in chronic pain patients over time: Associations with pain experience and psychological well-being. *Journal of behavioral medicine* 2015;38(2):384–96.
21. Covic T, Adamson B, Spencer D, Howe G. A biopsychosocial model of pain and depression in rheumatoid arthritis: A 12-month longitudinal study. *Rheumatology* 2003;42(11):1287–94.
22. Huang QS. A review on problems of China's hospice care and analysis of possible solutions. *Chinese Medical Journal* 2015;128(2):279–81.
23. Chengtek Tai M. Natural and unnatural: an application of taoist thought to bioethics. *Etica & Politica/ Ethics & Politics* 2004;6(2):1–9.
24. Hsin DH, Macer D. Comparisons of life images and end-of-life attitudes between the elderly in Taiwan and New Zealand. *Journal of Nursing Research* 2006;14(3):198–208.
25. Wang R, trans. *Zhuangzi*. ChangSha: Hunan People's Publishing House; 1999:363.
26. Hansen C. Taosim. In: Zalta EN, ed. *The Stanford Encyclopedia of Philosophy* Spring 2017 ed. State of California: Metaphysics Research Lab, Stanford University; 2017.
27. See note 25, Wang 1999, at 289.
28. See note 25, Wang 1999, at 91.
29. See note 25, Wang 1999, at 103.
30. See note 25, Wang 1999, at 43–5.
31. Khroutski K. Towards the bioethics of individual's health: introduction of the cosmist philosophical fundamentals. *Theoretical Medicine & Bioethics* 2002;12(1):2–8.
32. Puchalski C, Ferrell B, Virani R, Otis-Green S, Baird P, Bull J, et al. Improving the quality of spiritual care as a dimension of palliative care: The report of the Consensus Conference. *Journal of Palliative Medicine* 2009;41(1):885–904.
33. Jonas H. *The Phenomenon of Life: Towards a Philosophical Biology*. Evanston, IL: Northwestern University Press; 2001.
34. See note 25, Wang 1999, at 125.
35. See note 25, Wang 1999, at 127.
36. See note 23, Chengtek Tai 2004;6(2):1–9.