PALLIATIVE CARE IN THE ELDERLY

Raymond S.K. Lo, MRCP (UK), Dip Palliative Med (Wales), FHKAM (Med).
Senior Medical Officer.

J. Woo, MD, FRCP (Lond, Edin), FHKAM (Med).
Chief of Service.

Department of Medicine and Geriatrics, Shatin Hospital.
33 A Kung Kok Street, Ma On Shan,
New Territories, Hong Kong

Palliative Care in the Elderly: Summary

Palliative medicine is the study and management of patients with active, far advanced disease for whom the prognosis is limited and the focus of care is quality of life. It is increasingly recognised that principles of palliative care are universal, and should be applied in many different disease conditions. Palliative medicine and geriatric medicine both emphasize holistic care, with several features in common. Cancer is a prevalent disease in the elderly, which especially requires a palliative approach. Cancer symptoms are more difficult to manage in the elderly, and have been undertreated. Good palliation of symptoms requires comprehensive and multidimensional assessment rather than a blanket treatment of drugs. Palliative care in the elderly however should not be confined just to cancer. Other incurable diseases such as dementia, neurodegenerative disorders, end stage organ failure are also diseases of the elderly, which will benefit from palliative care. Patients may have palliative care needs in any clinical stage during their incurable illness and require support. The quality of life of elderly with incurable illnesses does not necessarily have to be poor. A wider adoption of palliative care approach from all health professionals, closer liaison between primary care, geriatric, palliative care physicians, development of hospital palliative consultative teams, together with specialised units caring for more elderly with greater needs, will help to achieve this goal.

Keywords: Palliative care; aged; hospice; elderly; holistic care.

Introduction: What is palliative care?

In 1987, Royal College of Physicians in United Kingdom recognised palliative medicine as a specialty, defining it as "the study and management of patients with far advanced disease for whom the prognosis is limited and the focus of care is quality of life". The aim is to control pain and other physical symptoms, as well as integrating psychological, social, spiritual care and support. The ultimate goal of palliative care is the achievement of the best quality of life for patients and their families. Similar to geriatric medicine, palliative medicine emphasizes on an inter-disciplinary approach in delivering holistic care. With the coordinated efforts of all disciplines (such as doctors, nurses, therapists, social workers, clinical psychologists, dietitians, pastoral care workers and volunteers), palliative care offers support systems to help patients live their remaining lives as actively as possible, as well as helping families to cope with patient's illness and death. Palliative care neither intends to nor postpone death, but affirm life and regard dying as a normal process. Since the pioneering work in 1960s by Dame Cicely Saunders in St Christopher's Hospice, London, palliative care has now grown extensively in developed and developing worlds. Various countries have included palliative care in their undergraduate curriculum and postgraduate medical education. The principles and values of palliative care are increasingly recognised.

Principles of Palliative Care are universal

Although traditionally palliative medicine has focused on cancer, its principles are said to apply to all diseases. Palliative medicine impinges on and frequently overlaps with many other medical specialties, not just with oncology. Palliative medicine and geriatric medicine in particular, share some similar principles and values. The following features are in common:

1. Cancer is a disease of the elderly. The prevalence of cancer is highest in the older age group. While geriatricians frequently encounter patients with cancer, palliative care physicians also often need to face the 4 giants of geriatric medicine: intellectual impairment, incontinence, instability and immobility.

2. A holistic approach is the fundamental principle for both specialties. Geriatrics and palliative medicine both incorporate a "whole-person"
rather than "organ-specialist" approach.
3. Both specialties practise and take pride in interdisciplinary team care.
4. Both specialties stress the importance of community care; such as geriatric day hospital, community geriatric assessment team, and day home palliative care service.
5. Both specialties emphasize the concept of "adding life to years when years cannot be added to life". Improving quality of life is the ultimate goal.
6. Death and dying and the associated ethics are important issues for both palliative care physicians and geriatricians.

Cancer in the elderly
Geriatricians need to be reminded that cancer is a disease of the elderly. Men and women aged 65 years and above are at high risk for major cancers. Data from U.S. Cancer Statistics Review shows that the risk of developing cancer for the >65 is 11 times greater than those <65 . Almost 70% of all cancer deaths in U.S. occur in individuals aged over 65 years. The issue of palliative care for cancer will become even more important in the future as the population ages. The medical, economic and social burden of palliative care for elderly people will escalate, with the demographic shift in aging distribution. Older persons do bear the brunt of cancer burden.

Comorbidity with concurrent health problems increase with aging, contributing significantly to the complexity of palliative care in the elderly. In the National Institute on Aging and the National Cancer Institute Collaborative Study, the mean number of comorbidities increases from 2.9 in the 55-64 age group, to 4.2 in the >75 age group. The number of medical conditions in an old person could be as high as 14 . It may be difficult to separate problems associated with a newly diagnosed cancer in an older patient, from his/her normal aging and age-related problems or chronic diseases. For example, symptoms from brain metastases may be difficult to distinguish in a background of mild cognitive impairment. Spinal cord compression as a cause of immobility may be missed. Symptoms of malignant hypercalcaemia are often non-specific in the elderly. Cancer itself is a difficult enough health problem to manage, and the additional conditions in old age add much to the complexity of diagnosis and decision making.

Despite the high prevalence and complexity of cancer in the elderly, recent studies show that older patients with cancer are often badly treated. Elderly patients are less likely than young patients to receive proper pain management. Elderly patients are less likely to take opioids for pain because of their attitudes and beliefs. They are also under-represented in prospective clinical trials on cancer and management. Barriers to provision of palliative medicine for the elderly are in fact multiple, relating to health professionals, patients themselves, or to the health care system. While a hospital palliative care ward for elderly people has been demonstrated to be beneficial, this specialised inpatient facility may not be feasible in every hospital setting. A better care for the elderly with cancer can only result from increased awareness and efforts by all involved practitioners such as geriatricians, oncologists, palliative care physicians, general and primary care physicians. Symptom control is, for example, one very important aspect of clinical management in elderly, which especially requires a palliative approach.

Cancer symptoms in the elderly
Comprehensive assessment and management of symptoms and symptom distress is vital in palliative care. The primary emphasis is of course on improving comfort and quality of life, rather than over-invasive investigations and prolonging suffering. This is particularly true in elderly with cancer, for whom the symptoms are often multiple, and the disease is often advanced and incurable. It should be remembered however that symptoms are subjective physical and psychological phenomena that arise from pathological states or disorders, and should never be viewed as diagnoses. While the cause of some symptoms in elderly with cancer can only be palliated and are irreversible, others symptoms may be easily remediable and should not be missed. Attention to details is important in evaluation, management and explanation: "why is this elderly with breast cancer vomiting? She is not taking morphine: she is not hypercalcaemic. Why is she vomiting?" This patient with cancer of the pancreas has pain in the neck. It does not fit with the usual pattern of metastatic spread. "Why does he have pain there?"

Many symptoms in palliative care can have easily remediable aetiologies, e.g. constipation can cause vomiting even when there is no obstruction, or oesophageal candidiasis can be the sole cause of dysphagia. Quoting Prof. Bernard Isaac's paper in 1973, "the undiagnosed in the elderly must not be confused as the irremediable".

Multidimensions of symptoms
Symptoms are measurable multidimensional experiences. A same amount of pathological
Impairment can have different degrees of impact and meanings for different individuals. Chronic pain as a symptom serves as a classic example. The concept of pain is a total pain, which incorporates physical, psychological, social, and spiritual components\(^5\). Pain may cause anxiety, fear, and depression. Pain may interfere with social interaction, impair physical performance, and limits independence. These complications in turn may aggravate the perception of pain. Different cultural or religious beliefs will influence a patient's attitude towards the suffering of pain. Vice versa, perception of pain may sometimes be a reflection of psychological, social, or spiritual turmoil, with no physical injury or nociceptive component. Such pain will not respond to a blanket treatment of morphine, and indeed has been characterised with the term "opioid-irrelevant pain"\(^6\). The multidimensional concept equally applies to many other symptoms. In dyspnoea, the sensation of shortness of breath leads to anxiety and fear which further aggravates the dyspnoea. In nausea and vomiting, the cause can indeed be wholly or partly psychogenic in origin. Symptoms are therefore inherently a subjective experience, and comprehensive assessment must take into account their multidimensional nature.

### Symptom Assessment Instruments

Measurement of palliative care symptoms must therefore take account of patients' ratings and perspectives. Objective signs are important and need to be monitored, but should not be substituted as patients' self-report. It has already been shown that health carers' assessment of symptoms may not correlate with patients' own assessment\(^7\). Similarly, relatives' assessment also only approximate in objective measures, but differ in subjective aspects of patients' functioning\(^8\). The accuracy of a clinician's assessment cannot be assumed, especially on the impact of symptom on quality of life\(^9\). Various multidimensional patient-rated assessment instruments have therefore been developed, e.g. Edmonton Symptom Assessment Scale\(^10\), Memorial Symptom Assessment Scale\(^11\), and the Rotterdam Symptom Checklist\(^12\). Alternatively, instruments are also available for selected symptoms, such as Brief Pain Inventory\(^13\), modified Borg dyspnoea scale\(^14\). Selection of an instrument for the older patient however, must be guided by the practicability and acceptability of the instrument. The older patient may be handicapped in hearing or speech and is likely to be fatigued or cognitively impaired. Assessment in some circumstances will have to be by observer-ratings, and Support Team Assessment Schedule (STAS) is one such available instrument with demonstrated clinical validity\(^25\). STAS has been successfully implemented in a local palliative care unit and proves to be a useful auditing tool for symptom control\(^26\).

### Pain in the Elderly

Large scale surveys from various countries have shown that pain is one of the most prevalent symptoms in cancer patients\(^27\)-\(^29\). Locally in Hong Kong, an audit of 133 palliative care cancer patients with a mean age of 64 years, also showed a high pain prevalence of 50%\(^30\). Pain ranked as the second most prevalence symptom, closely after fatigue in this study (table 1). It should not be forgotten though that non-cancer pain is also prevalent in the older patients. There is compelling evidence that a significant majority of community dwelling and institutionalised elderly experience pain which may interfere with normal functioning\(^31\). Musculoskeletal pain are particularly common, with an age-related increase in prevalence\(^31\),\(^32\). However pain in elderly is often undertreated\(^31\),\(^33\),\(^34\). Local study has also shown that community elderly with musculoskeletal complaints receive inadequate pain management\(^35\). Barriers to management of pain may be patient related, which have been demonstrated to be higher in the elderly\(^36\). Patient related barriers may include reluctance in reporting pain, poor compliance in following treatment, concerns about side effects, fear of tolerance and addiction to morphine, and mistaken belief that pain is

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<th>Table 1: Prevalence of physical symptoms in 133 consecutive admissions to local palliative care unit.</th>
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<td><strong>Oral discomfort</strong></td>
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<td><strong>Ascites</strong></td>
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<td><strong>Diarrhoea</strong></td>
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inevitable and has to be accepted\textsuperscript{37}. Good communication and explanation to elderly is paramount in overcoming such barriers. Physician related barriers also exist, either in failure to assess the severity of pain, or in knowledge deficits in pain treatment\textsuperscript{27,38}. In recent years, there have been substantial increase in the understanding of physiology of pain and its treatment. Traditionally cancer pain has served as the model for studying pain, from which much of the recent knowledge has been derived. Although there are still gaps in our knowledge of opioid pharmacology, more rational and appropriate use of opioids analgesia have now resulted. The Cancer and Palliative Care Unit of the World Health Organisation has proposed a useful approach to analgesia in cancer pain, which is widely accepted and become known as the WHO analgesia ladder\textsuperscript{39}. The WHO ladder advocates a three step approach, emphasizing the choice of analgesia on the intensity rather than the aetiology of the pain (Fig 1). For mild cancer pain, step 1 analgesia with non opioid ± adjuvant therapy can be tried, whereas for those with moderate to severe pain, either step 2 analgesia using weak opioids or step 3 analgesia using strong opioids should be commenced, ± adjuvant therapy ± non-opioids, depending on the severity and type of pain (Table 1). Analgesic regime can go “up and down” the ladder depending on the progress of disease, but should not move “laterally” in search of another analgesia on the same ladder if the pain does not respond. Opioids should be given regularly and prophylactically by the clock, with adequate as required dosage for breakthrough pain. A double dose at bedtime usually enables a patient to go through the night without waking in pain. Oral route is the preferred route for analgesia if possible, reserving parenteral route for patients who can’t swallow or have intractable vomiting. Adequate laxative should always be co-prescribed with opioids to prevent constipation, whereas side effect of nausea is often transient for the first 48 hours and responds well to antiemetics e.g. oral haloperidol 0.5-1.5 mg at night, or oral cyclizine 50 mg three times a day. Elderly have reduced clearance of opioids, and increased receptor sensitivity leading to increased susceptibility to opioid analgesics. Oral morphine for the elderly therefore should be administered with low dose of 2.5-5 mg, and titrated cautiously to 10 mg, 15 mg, 20 mg and upwards if necessary. Time interval between doses may also be lengthened to minimise side effects\textsuperscript{40}. “Start slow, go slow” policy with opioids seems to be safest with the older age group, while further studies on impact of aging on pharmacokinetics and pharmacodynamics of opioids are awaited\textsuperscript{41}. Other significant advances in the understanding and management of pain have taken place in recent years. Newer preparations of opioids are now available. The understanding in the theory of “opioid rotation” has increased\textsuperscript{42}. Although more clinical experience is needed before it can be widely accepted, opioid rotation may be recommended when morphine side effects are intolerable / unacceptable even though analgesia is satisfactory. While treatment of neuropathic pain still remains a clinical challenge, the understanding of its pathophysiology has also improved\textsuperscript{43}. Nonetheless further clinical trials of pain management are still desperately needed, notwithstanding the difficulty in research in ill and terminal cancer patients. The art of palliation must go hand in hand with the science of clinical research evidence.

**Quality of life in elderly with incurable disease**

The ultimate goal for palliation of symptoms is the achievement of best quality of life for the patient. It is a multidimensional concept, including various domains such as physical, functional independence, psychological, social, spiritual, and existential\textsuperscript{44}. It serves as a final outcome indicator, reflecting the impact of a disease from a patient’s perception. However quality of life is subjective and difficult to measure, especially in elderly patients. The quality of life of elderly with incurable illnesses does not necessarily have to be poor. Quality of life can be seen as the gap between patient’s expectations and the reality of the situation\textsuperscript{45}.
Elderly patient's quality of life is inversely proportional to the size of gap: the smaller the gap, the better their quality of life. It is important to keep this in mind as the elderly person's expectations often adjust as acceptance of functional limitations and reality occur. The extent of acceptance and coming to terms to a terminal illness will depend on patient's personality, religious and cultural background, as well as support and counselling from health professionals and carers. Dying on one's own, annihilation and abandonment, what comes after death, and the moment of death itself can all trigger fears, impairing the quality of older patients' remaining days of life. Attention must be given to the needs of elderly for counselling when facing an incurable illness.

Quality of life emerges very much as a distinctly Western notion, and interpretation of its concepts are likely to be different in other cultures and religions. Quality of life of older people is also influenced by the attitudes and values of society. Cross-cultural validation is therefore needed, before Western quality of life assessment tools are to be applied in different parts of the world. Nonetheless, there seems to be now an emerging body of evidence that the quality of life concept does have cross-culturally robust constructs. Physical, psychological, social functions, noxious symptoms and sensations and family hardship all appear broadly relevant across different cultures. In a local study of 200 palliative care patients with mean age of 60, cross-cultural validity using modified McGill quality of life scale was demonstrated. Principal components analysis showed that Hong Kong Chinese palliative care patients also shared similar domains in quality of life with the West: physical, psychological, meaning of existence, support and control. The study provided preliminary evidence that the concept of existentialism or meaning of life is relevant for Hong Kong Chinese, playing a part in determining their quality of life in a terminal illness.

Community care for elderly with incurable disease

Community care is a vital component of holistic care, which contributes significantly in improving patients' quality of life. With adequate day and home care, elderly patients with incurable diseases can often be managed in the community. Both palliative medicine and geriatric medicine emphasize the importance of continuing community support. For geriatric medicine, provision of geriatric day hospitals and community geriatric outreach teams serve towards this purpose. In palliative day care, the focus is on peer support, social/recreational activities, respite care, as well as rehabilitation. As for palliative home care, an ideal service would comprise of 24 hour care of physical symptoms at home; emotional, social, practical support of patient and family; and bereavement support. Currently in Hong Kong, there are 11 palliative home care teams and 4 palliative day care centres. More research is needed for evaluation of outcomes and cost effectiveness in community care for geriatric and palliative medicine alike. One local study reports that palliative day/home care services can help utilise hospital beds more optimally, with increased turnover rates, discharge rates and bed occupancies, and reduction of emergency readmissions. With better primary care services, improved home care nurses' skill, and closer liaison between palliative and geriatric services, more elderly patients with incurable diseases can be managed at home. Although our local housing environment may not always be comparable with those in the West, it is still possible to look after patients at home if they have a will to do so. Even though a house is not in ideal condition, it is "a man's home, the creations of his labour and his love".

Need for Palliative Care in Elderly: with or without cancer

Palliative care for the elderly should not be confined just to those with cancer. In the past, interest and research was mainly in patients dying from cancer. Less attention has been paid to other incurable diseases. Many incurable diseases are also diseases in the elderly e.g. dementia, Parkinson's disease, motor neuron disease, end stage organ failure. Heart failure is one such prevalent condition in the elderly. Yet despite the wealth of therapeutics advances, quality of life of end stage heart failure patient is poor, and discomfort and stress is worse than in cancer. In a study of care of the dying in United Kingdom, people who died from heart disease suffered from distressing symptoms for more than six months. Distressing symptoms include not just dyspnoea, but also pain, nausea, constipation, and low mood, which were all poorly controlled. Similar unresolved needs were also found in patients dying from stroke and dementia. Likewise for Parkinson's disease, a recent editorial stressed the importance of psychological symptoms. Poorer quality of life was demonstrated to be associated with increasing age and disease severity. In motor
neuron disease, as high as 64% of patients reported the symptom of pain. It is apparent that many of our elderly patients dying from diseases other than cancer have a period of progressive illness with symptoms, psychological and practical needs. Their families will need support during care and bereavement. In non-cancer conditions, it has been increasingly shown that the judicious use of opioids for pain can be safe and effective. Retrospective studies and recent randomised controlled trials have supported the use of opioids in chronic non-cancer pain. In end stage conditions, the worry of psychological dependence or addiction should not be a barrier leading to inadequate treatment and prolonged suffering. However, like with cancer pain, it is essential that all reasonable efforts have been made to ascertain the cause, including nociceptive, neuropathic and psychological conditions. If the pain does not respond to non-opioids, and psychological/social/spiritual causes have already been looked for and dealt with, then the use of opioids is justified. Similar to cancer pain, the WHO analgesic ladder can be followed. As for dyspnoea in non-cancer conditions, opioids have also been tried with varying degrees of success. Early studies reported usefulness with oral and nebulised opioids in improving exercise capacity and endurance in chronic obstructive pulmonary disease patients. Morphine probably reduces breathlessness by several actions: cerebral sedation, reduction of anxiety, reduction of sensitivity to hypercapnia, improvement of cardiac function, action on local airways opioid receptors, and analgesic effect. Unfortunately later clinical studies yielded only inconclusive and negative results. While there may be a role for opioids in dyspnoea from cancer, their use in non-cancer conditions remain controversial. More studies are needed.

It is often asked when should palliative care be offered to elderly with incurable conditions. When does an illness become progressive and terminal rather than chronic? Indeed, uncertainty often arises about the stage of the disease at which palliative care should start. In the authors' opinion, palliative care should be offered according to the needs of the patient regardless of clinical stage in an incurable illness. For example, an elderly patient facing a newly diagnosed Parkinson's disease will probably require intensive counselling and support. Palliation of pain may be neglected at any stage in motor neuron disease. A survey of COAD patients also demonstrated unmet needs, revealing overall poor quality of life relating to social isolation, emotional distress, physical symptoms and disability. The model of care should shift from ad hoc reactive service provision focusing on acute exacerbation, to a more holistic care with better interface between physical health and psychosocial needs. In order to target the palliative care approach more effectively, a more comprehensive needs assessment is essential. How exactly can palliative care services be delivered to those chronically ill in need, will depend on the set up of local health care systems. It is clearly impossible for palliative care physicians to cover the needs of every chronically ill or dying elderly. Yet wider adoption of palliative care approach from all disciplines, development of hospital palliative consultative teams, specialised palliative care units taking on those non-cancer patients with greater needs, will help to achieve this goal.

Ethical issues

Another challenge which geriatricians often face in caring for the elderly patients, is the ethical issue with death and dying. Geriatricians will need to make clinical decisions, often concerning "life-and-death", based on application of ethical principles. Geriatricians therefore must have a clear framework in their mind to apply to each decision. Indeed, all professionals in the inter-disciplinary team must understand ethics, as major responsible decisions often need to be team decisions. Many difficult clinical decisions have to be made near the end of life. For example, it may be an appropriate decision to withhold treatment of recurrent hypercalcaemia when patient is in an inevitable decline. Decision for use of antibiotics in terminal phase will depend on whether it can provide any relief in symptoms. Blood transfusion will only be justified if it can improve weakness, dyspnoea and overall sense of well being. Artificial feeding and intravenous fluids beyond the specific requests of patients carry only minimal benefit. Small amounts of appropriate texture of food when desired, together with adequate mouth care is often all that is needed. In general, for the elderly in terminal condition nearing the end of life, excessive and invasive treatment are futile and cause more suffering than benefit. Decisions at the end of life are difficult, and it is sometimes not easy for health professionals to "let go" and withhold invasive treatment. A clear understanding of basic ethical principles will help towards decision making in difficult circumstances.

The "four principles plus scope" approach provides a simple, accessible, and culturally neutral...
approach to think about ethical issues in health care. It is developed in the United States, and is based on four common basic prima facie moral commitments: respect for autonomy, beneficence, non-maleficence, and justice, plus concern for their scope of application (table 2). These principles of course do not provide ordered rules, but may be useful references when geriatricians are faced with difficult ethical issues. It offers a common, basic, moral analytical framework and language. On the other hand, debate on the hot ethical issue of euthanasia and assisted suicide continue. Full arguments for and against the case of euthanasia are beyond the remit of this paper but they do perhaps fuel efforts to highlight better symptom management and respect for patient choices at the end of life. There should be of course no ageism in care for the dying. Quoting Dr. Derek Doyle, "skilled, patient-centred terminal care is the right of every man and woman coming to the end of life whatever their age."

### Conclusion

Both geriatrics and palliative medicine have gradually developed in the last decades and their contribution to health care are increasingly recognised. As knowledge increases, so does specialism. It should not be forgotten though both specialties do share a common clientele: elderly people with incurable illnesses. Both specialties have a formidable and challenging task. In providing the best holistic care to our dying elderly patients and their families. Much expertise can be shared between the two specialties. Palliative care in the elderly should not be neglected, and old people should have the right to "live until they die."

### References


### Table 2. The “four principles plus attention to scope” ethical approach

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<tr>
<th>Respect for autonomy</th>
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<td>Respect for autonomy is the moral obligation to respect the autonomy of others in so far as such respect is compatible with equal respect for the autonomy of all potentially affected.</td>
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<td>Implications:</td>
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<td>1. Obtain informed consent from patients before we do things to them</td>
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<td>2. Not to deceive patients, for example about their diagnosed illness unless they clearly wish to be deceived</td>
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<td>3. Medical confidentiality is another implication of respecting people’s autonomy</td>
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<td>4. Good communication with clients, providing adequate information when patients do want information</td>
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<th>Beneficence and non-maleficence</th>
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<td>Provide net medical benefit to patients with minimal harm. Requires being clear about risk and probability of interventions. Must however respect patients’ autonomy for what constitutes benefit for one patient maybe harm for another.</td>
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<td>2. Rights based justice: Respects for people’s rights</td>
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<td>3. Legal justice: Respect for morally acceptable laws</td>
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<td>Attention to what or to whom we owe the above moral obligations.</td>
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