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Abstract

Health care services in Bhutan have improved significantly in recent decades. Yet enormous challenges remain because of the lack of resources and increase in lifestyle- and stress-related disorders. Buddhist practices, including mindfulness meditation, will have an important role to play in mitigating the effects of modernization and material desires. The hitherto doctor-centered "medical model" of treatment will need to give way to a holistic, patientcentered bio-psychosocial approach to health care management. In addition, the private sector will need to play a major role to sustain quality health care service in the country.

Introduction

In less than 50 years – a very brief time for national development – Bhutan has achieved astonishing progress. This has been particularly the case in upgrading health care services under the enlightened leadership and guidance of our benevolent Kings, especially His Majesty Jigme Singye Wangchuck, the fourth Druk Gyalpo. Until the early 1960s, only traditional systems of medicine had been practiced in the country. Modern health care services began with a handful of Bhutanese being sent abroad for medical or nursing training, while infrastructure was limited even after their return to only a few small hospitals and dispensaries. Gradually, however, both numbers of trained health workers and infrastructure grew: Today the country has 157 medical doctors, 38 traditional doctors, 559 nurses and 2,451 other types of health workers. A well-established network of 178 primary health care 413 centres and 30 hospitals serves patients. Most public health programmes, including a national community-based mental health care programme, are integrated and delivered through this network.

The Bhutanese health care system encompasses three unique characteristics:

1. All aspects of health care, including tertiary medical treatment of Bhutanese citizens in other countries, are delivered free by the Government;

2. Both modern and traditional systems of health care are offered side by side in all district hospitals; and

3. Both prevention and control of diseases are integrated into the well-developed primary health network, including the national community-based mental health programme.

Moreover, a less tangible – but no less important – characteristic also influences both health care as well as health-seeking behaviour in Bhutan: Vajrayana Buddhism brought here in the 8th Century by the great Indian mystic Padmasambhava, whom Bhutanese believe to be the second Buddha. Buddhism has been instrumental in shaping Bhutanese culture and psychology, tempering the effects of the harsh realities of life in the rugged Himalayas. For generations of Bhutanese, most of whom toiled physically to meet their basic material needs in this environment, an abundance of spiritual practice, social cohesion and compassion offset the hardships.

Thus, Bhutan has transformed itself from a medieval community to a modern state while still conserving most of its rich traditions and Buddhist values. Indeed, Bhutan's health indicators have surpassed many developing countries that began their development far earlier. The nation's per-capita income of US\$ 2,160.02 (NSB, September 2008) is one of the highest in South Asia, while life expectancy is about 70 years. Maternal mortality has

decreased from 380 per 100,000 child births in the 1980s to 260 in 2000 (NHS, 2000), and infant deaths have drastically reduced from 120 per 1,000 live births in the 1980s to 40 per 1,000 in 2005 (PHCB, 2005).

Yet even while Bhutan has developed its modern health system in a relatively short time, numerous challenges remain, particularly with regard to mental health care; the most important of these are briefly analyzed in the section below.

Challenges to Providing Optimal Mental Health Care

Increased Prevalence of Disorders

As a rapidly developing country, Bhutan is already facing a double burden of disease prevalence: On the one hand, it still grapples with the prevalence of communicable and nutritional deficiencies because of poor sanitation and poverty, while on the other, it increasingly faces lifestyle disorders such as diabetes, hypertension, heart disease and psychological disorders, particularly including drug and alcohol abuse. These lifestyle disorders are only exacerbated by the country's growing affluence, as seen in its availability of cars and mechanical farming tools, as well as in its relatively rich and fatty diets and more sedentary lives. By 2020, according to World Health Organization predictions, cardiovascular diseases will rank as the top cause of disability-adjusted life-years globally, while depression will be second. Even in Bhutan, the number of cases involving mental illness or substance abuse, including alcohol, at the psychiatric clinic of the Jigme Dorji Wangchuck National Referral Hospital and health facilities nationwide has shown a manifold increase in recent years - and is expected to rise further as awareness of health matters increases among the people. Sustaining free health services and improving their quality in Bhutan will become more and more difficult as costs escalate and chronic diseases proliferate with increases in population and longer lives.

Awareness and Attitudes

Many Bhutanese, especially an older, largely illiterate generation continue to think as like their forebears. This has significant implications for healthy living habits and response to treatment, given that elders remain revered for their wisdom and play an important role in family decisions, including treatment of ill family members. Such elders are likely to attribute illnesses to a supernatural cause, such as an evil spirit or ghost, and to rely upon the performance of extended rituals before seeking help from a modern health provider. At the same time, however, this may deter individuals from taking responsibility for initiating treatment themselves; for example, alcoholics experiencing withdrawal symptoms such as hallucinations and/or delusions often attribute their symptoms to spirit possession rather than accepting their addiction to drinking as the root cause.

In general, because Western medicine is relatively new to our population – and is generally considered the last resort by a small section of the society – improved awareness is needed with regard to its benefits and effectiveness, by targetting this particular section. This can counterbalance the fear, skepticism and suspicion that some Bhutanese still harbour, or the false hopes arising from oversimplified beliefs in dramatic results: the expectations of a magic tablet or injection for any problem, no matter how large or small.

Ironically, some modern Bhutanese health workers – pressed for time or lacking skills to provide bio-psychosocial holistic medicine – reinforce this belief by complying with such demands and exhibiting a paternalistic attitude. This misguided approach represents a further challenge to providing effective comprehensive management to patients. At the same time, Western psychological concepts and treatment methods have come to the country only recently. Not only are they new to the general public, but also to the modern health providers. Again, this lack of

health provider skills for a bio-psychosocial approach to modern psychological treatment, combined with the public's lack of awareness, poses major challenges in a traditional society like Bhutan. Western psychology emphasizes the individual, rather than the family or community, as the focus of treatment. However, this means that the individual should have a basic understanding of the mind-body connection and a certain level of participation in the therapeutic process – a daunting concept for many Bhutanese. Reintegrating mind and body in the post-modern world (Astin, 1999) is critical, including in Bhutan, to recapture the belief that these are one, not separate.

The country's benevolent approach of providing free health care services to an entire population also gives rise to unwanted side effects, including fostering dependency and a devaluation of services by clients, while providers are at risk of developing burnout or complacency. Continuing social stigma with regard to mental disorders, and an absence of mental health and privacy laws, further exacerbates the situation. In all, this combination imposes tremendous challenges to providing effective management of mental disorders.

Social factors

Although the Government of Bhutan has consciously tried to balance development with conservation of the country's rich traditions and Buddhist values, it has not been entirely successful in preventing the issues that arise with development and globalization. For example, rural-urban migration has accelerated: Thimphu, the capital, has grown in barely two decades from about 20,000 people to 100,000 – about 1 in 7 of the population – and the trend continues. Traditional safety nets provided by extended families in a rural, cohesive community setting are fast diminishing in urban areas, with families becoming nuclear, living in small apartments and depending entirely upon market forces of supply and demand. Monetization of the economy and low

incomes force both spouses in many families to work outside the home, leaving children in the care of nannies or maids. Because of work pressure, the distractions of television, and drinking and gambling habits to some extant, many urban parents are finding less time for children, while grandparents prefer to stay in their native villages. Thus, numerous Bhutanese urban children are left unsupervised, frequently resulting in their turning to alarming habits such as alcohol or drug use. Moreover, many other complex urban social issues – violence against women, for example – are often treated only as medical cases because of a shortage of social protection services.

While Bhutanese have not yet succumbed to what the French sociologist Aniel Durkham called anomie – whereby young people in fast-transitioning societies become disillusioned and often commit suicide – the warning signs are there. Many young Bhutanese drug addicts have died in recent years from overdoses, a new phenomenon in our society that has left the older generation bewildered and the youth without help. At the same time, these youth are experiencing fierce competition for limited job opportunities, even as materialism begins to take root. Today's Bhutanese youth thus face increasing stress and resultant mental health problems; because of the lack of a traditional support base and traditional healers in urban settings, many are now seeking treatment from modern health care services.

Lack of resources

Bhutan confronts an acute shortage of well-trained health workers, especially in the specialist medical sector, including mental health professionals. Demand is outstripping supply in all sectors of health care because of expanding workload and increasing complexity of the profession. Nonetheless, despite the hazards of burnout, the biggest issue facing our health care workers, as noted above, remains the lack of understanding of and exposure to the bio-psychosocial aspects of treatment and management of

mentally ill patients. This can be traced to the "medical model" of treatment emphasized during medical training outside Bhutan. Compounding this is the risk of losing the comparatively few doctors and health workers available in Bhutan to more developed countries, which can pay them much more than the Government can afford.

A need for strengthened adequate treatment facilities and supplies offers additional huge challenges to delivering adequate treatment to patients. For example, there are only five Bhutanese physicians, four surgeons, one ear, nose and throat specialist, four pediatricians, four gynaecologists, and five anaesthesiologists for the country's 700,000 people. The problem in mental health is even more acute: The mental health team for the country consists of only two trained psychiatrists and four trained psychiatric nurses; there are no clinical psychologists, social workers or counsellors. Recruitment of expatriate medical professionals to work in Bhutan also is a challenge because of low pay and difficult living circumstances. Yet beyond these constraints, opportunities are also looming that need to capitalized upon.

Opportunities for providing optimal mental health care

Democracy

The nation has embarked on a democratic form of government at the behest of its Fourth King, His Majesty Jigme Singye Wangchuck. His Majesty's enlightened leadership also gave rise to the vision of Gross National Happiness that represents Bhutan's modern development philosophy. Democracy will influence mental health in many ways: free speech and individual freedom will encourage open debates about major issues, including mental health. In turn, such an environment will foster better understanding about these issues, as well as encourage the seeking of better answers. Thus, Western psychology, which is based upon

democratic principles and an egalitarian society, is likely to find increasing relevance.

Education

Like democracy, the rapid expansion of modern education in the country is apt to spur open debates and evidence-based solutions to health issues. Increasing efforts to achieve a knowledge base for an enlightened, open society, including the embedding of a more modern analytical and examination system, offer opportunities to more than 90 percent of school-age children and youth who attend either schools or vocational institutes. With a rapidly growing literacy rate among the youth, it is expected that the demand for Western medicine and psychological therapy also will increase. Lastly, the Government plans to establish a medical college soon, which would facilitate the training of our own set of modern doctors and health workers with traditional Bhutanese values and culture.

Complementary medicine

Traditional medicine is popular in Bhutan because it has evolved from indigenous culture, based on collective wisdom and experience. It is informal and affordable, with a more holistic and patient-centered approach rather than a disease orientation; generally it emphasizes the collective responsibility of society, rather than an individual, to cure illnesses, thereby imposing less pressure upon the individual to get well. Research suggests that one of the main reasons patients are attracted to traditional medicine is that they find many of these therapies are more harmonious with their own philosophical orientation toward health (Astin, 1999). Thus, traditional medicine plays an important role in providing care to a large section of our population – and for conditions such as psychosomatic disorders, it may offer better treatment outcomes than modern medicine.

A saying in the local vernacular called *menchoy-rimdo* – literally translated as "treatment-prevention" - points to the fact that traditional medicine addresses both the outcome as well as the cause of disease, so that similar disease conditions are prevented in the future. A patient's beliefs about health and illness therefore are critically important for self-care and may influence both behavioural and physiological responses to illness, thereby enhancing healing. Enhancement of a patient's self-efficacy through information, education and the development of a collaborative relationship between patient and healer is a cardinal goal in all clinical encounters (Astin, 1999). However, to maximize the effectiveness of traditional medicine in our country, a need exists to coordinate the efforts of various actors involved in treatment, including indigenous doctors, monks, shamans and astrologers, and to establish standards of care and codes of conduct and ethics. Furthermore, collaborative research studies should be conducted to compare the efficacy of traditional and modern medicine for specific disorders.

Social support

Providing social support likewise is an important element of patient management, especially for those with mental disorders, in order to mitigate the effects of the condition as well as to promote overall well-being and prevent relapses. Social service organizations such as His Majesty's Office of Social Welfare and non-Governmental organizations such as the Youth Development Fund (YDF), Rehabilitate Educate Nurture Empower Women (RENEW) and the Tarayana Foundation must be encouraged to coordinate and collaborate to avoid duplication of efforts and maximizing of support to needy people. It is hoped that in the long run, a separate Government social service department, run by professional social workers, can be set up to look after the needs of the poor and ill.

Buddhist concepts and meditation practices

As previously noted, Vajrayana Buddhism has a profound effect on our culture and attitude to life. Buddhists believe that being born in the human realm is most auspicious for the practice of Buddhism and attainment of enlightenment and freedom from rebirth in the cycle of samsara. To achieve this, one must defeat the three forces that perpetuate samsara: greed, hatred and ignorance, the root causes of all suffering. Greed is represented by desire, lust, attachment, addiction, materialism and unrestrained desire to have more and indulge more; hatred by jealousy, rivalry, aggression, violence and unrestrained ego; and ignorance by delusions, illusions, false beliefs and lack of consciousness or insight. The Buddha's Four Noble Truths teach what suffering is, how suffering is caused, the root causes of suffering, and how to end suffering by following the Eightfold Path of right thinking, right speech and right action. Ordinary followers practice compassion and loving-kindness, while accomplished Buddhists practice higher forms of meditation such as defeating ego and dwelling on emptiness in order to end suffering and attain sublime blissfulness and peace.

Although mindfulness meditation practice is inherently Buddhist and has been used by accomplished Buddhist monks for centuries to refine the mind and progress toward enlightenment, in recent decades Western scientists and psychologists also have used it at a mundane level to alleviate the suffering of present life. Through scientific research, they have discovered that such mindfulness meditation acts as an effective therapy for many psychological as well as physiological disorders. Ironically, something originally inherent to the esoteric East has been adapted by the West – and now can come full circle again to the East to prove beneficial to the wider population.

In Bhutan, what will be most useful is something in between the mundane practice and the highest form of renunciation and ascetic

meditation practice: a "middle path," as it were, comprising a simple form of mindfulness meditation practice that has already flourished in the West and that can be easily propagated among our own population.. We already have a fertile spiritual field, and only a little effort on our part can work miracles, serving as the answer to our increasing desires and sufferings related to materialism with modernization. Although many Bhutanese Buddhists may still believe that the sacred teachings should not be diluted by letting any and all practice them, I believe that any practice should change with time and be able adapt to a changing environment. Buddhist practice should evolve as well, to find new meaning and relevance to today's generation.

What is mindfulness meditation?

While many religions feature meditative disciplines, mindfulness has been called the heart of Buddhist meditation (Kabat-Zinn, 2003; Thera, 1962). Yet mindfulness is more than meditation: It is "inherently a state of consciousness" that involves consciously attending to one's moment-to-moment experiences (Brown & Ryan, 2003); meditation practice is simply a "scaffolding" used to develop the skill of mindfulness (Kabat-Zinn, 2005). Simply, mindfulness means completely paying attention in a particular way, on purpose, in the present moment, non-judgmentally, and increasing both awareness and acceptance of internal experiences (e.g., thoughts, feelings, memories, bodily sensations) while decreasing attachment to these experiences (i.e., seeing oneself as separate from one's pain, thoughts, feelings, memories). Being mindful presupposes that individuals whose awareness is not impaired have a choice in what phenomena they attend to and how they act. Being mindful also may reduce tendencies to take on others' negative emotions. It is through experiential exercises in meditation practice that patients grapple with concepts of acceptance, willingness and mindfulness.

Within the fields of mental health and psychiatry, meditation as an age-old self- regulating strategy is attracting renewed interest. With its emphasis on developing detached observation and awareness of consciousness, the techniques of mindfulness meditation may represent powerful cognitive behavioural coping strategies that can transform the way in which we respond to life events. Even so, meditation research has encountered major methodological and conceptual limitations (Baer, 2003; Canter & Earnest, 2003) in design, assessment and subjects, featuring small sample sizes, sub-optimal controls, widespread reliance on selfreported results and short-term follow-ups. A significant caveat is that some therapeutic effects may dissipate if practice is discontinued, and as with many self-regulation strategies, adherence and compliance can be major issues. Nevertheless, the current literature suggests that meditation can have significant positive effects and therapeutic benefits.

Positive effects on mood disorders

Meditation can reduce arousal states, such as when someone experiences a "fight or flight" response to stressors, and may ameliorate symptoms in anxiety disorders, panic attacks, phobias and insomnia (Kabat-Zinn et al, 1992). As demonstrated in hundreds of studies over four decades, mindfulness-based stress reduction techniques also can improve coping skills and reduce emotional distress, decreasing the subjective experience of pain and stress. At the same time, it is reported to alleviate aggression and recidivism in prisoners and to lead to the reduction of usage of both legal and illegal drugs. In one dramatic finding, it improved psychological functioning and reduced mortality among individuals living in a nursing home (C. Alexander, Langer, Newman, Chandler & Davies, 1989). Thus, stress-related benefits are consistent with the classic claim that the central effect of meditation is calming of the mind.

Positive effects on physiological disorders

Beyond the benefits for primarily mental disorders, meditation also is a useful adjunct in the long-term treatment of hypertension, heart disease, cancer, fibromyalgia and chronic pain syndromes (Schnider et al., 2005; Carlston, Speca, Patel & Goodey, 2003; Davidson et al., 2003; Kabat-Zinn 2003; Weiss-Becker et al., 2002; Williams, Kolar, Reger & Pearson, 2001). Likewise, it can cause positive responses in conditions of asthma, stuttering, type 2 diabetes, and premenstrual syndrome (Murphy & Donovan, 1997). Meditation also has been found to enhance treatment for psoriasis, prostate cancer and atherosclerosis (Kabat-Zinn, 2003; Zamarra, Schneider, Besseghini, Robinson & Salerno, 1996).

With many of these psychological and physiological diseases increasing rapidly among Bhutanese, investigating meditative traditions with greater cultural and conceptual sensitivity opens the possibility of a mutual enrichment of both the meditative traditions and modern psychology alike, with far-reaching benefits.

Positive effects of meditation on well-being

Few research studies have examined meditation's original purpose as a self-actualization strategy to enhance qualities such as wisdom and compassion. However, some pioneering studies provide a valuable foundation. Mindfulness meditation appears to enhance perception as measured by perceptual sensitivity, processing speed, empathy and synthesis (Murphy & Donovan, 1997; Shapiro et al., 1998; Walsh, 2005). It also may improve concentration, reaction time, motor skills and field independence (Andresen, 2000; Murphy &Donovan, 1997). Likewise, it is asserted that cognitive performance is enhanced on measures of learning ability, short- and long-term memory recall, academic performance and performance on a sub-scale of the Wechsler Adult Intelligence Scale, as well as some measure of creativity (Carnason et al., 1991;

Dillbeck, Assismakins & Raimondi, 1986; Shapiro et al., 1998; So & Orne-Johnson, 2001).

Positive effects of meditation on personality

Personality variables also have been found to be positively modified. A study of five personality factors found that conscientiousness was unchanged, but the other four factors extraversion, agreeableness, openness to experience, and especially emotional stability - all increased (Travis, Arenander & DuBois, 2004). Because meditation is a self-regulating strategy, it is not surprising that practitioners report feelings of improved selfcontrol and self-esteem (Andresen, 2000). Given that several studies have found that meditators had higher empathy ratings, it also is not surprising that measures of interpersonal functioning and marital satisfaction increased (Tlocznski & Tantriells, 1998). Finally, several studies have suggested that meditation may foster maturation, because meditators tend to score higher on measures of ego, moral and cognitive development, self-actualization, coping skills and defenses, and states and stages of consciousness (C. Alexander & Langer, 1990; C. Alexander et al., 1991; Emavardhana & Tori, 1997; Nidch, Ryncarz, Abrams, Orme-Johnson & Wallace, 1983; Travis et al., 2004).

Positive effects of meditation on addiction disorders

Some studies have suggested that mindfulness meditation and spirituality decrease the chances of relapse in tobacco, alcohol and drug addiction treatment, which has important implications in the Bhutanese context. Mindfulness meditation also showed positive effects on impulsive behaviour and state of mind. Importantly, traditional cognitive behavioural therapy techniques attempt to change the *content* of thoughts (e.g., challenge maladaptive thoughts), whereas mindfulness techniques attempt to change a person's *attitude* toward their thoughts, feelings and sensations. Not only have some researchers found increased dopamine release

during meditation, which was strongly associated with a reduced desire for action (Kjaer et al., 2002), but also Lazar et al. (2002) found that meditation results in neurological changes associated with increased levels of alertness, relaxation and attention control. These neurobiological findings support the hypothesis that meditation enhances awareness and the cultivation of alternatives to mindless, compulsive behaviour (Marlatt, 2002). Groves and Farmer (1994) concluded that "... in the context of addictions, mindfulness might mean becoming aware of triggers for craving ... and choosing to do something else which might ameliorate or prevent craving, so weakening the habitual response." In this sense, mindfulness meditation serves as a positive and gratifying "alternative addiction" – and more than just a coping strategy for dealing with urges and temptations.

In addition, Kabat-Zinn (1990) and Segal et al. (2002) have proposed a new cognitive behavioural intervention for substance use disorders called mindfulness-based relapse prevention. The goal here is to develop awareness and acceptance of thoughts, feelings and sensations through practicing mindfulness, and to utilize mindfulness skills as an effective coping strategy in the face of high-risk situations. The addition of mindfulness provides clients with a new way of processing situational cues and monitoring their reactions to their environment. All these can prove useful to our patients here in Bhutan: All we need is to train the patients to practice simple mindfulness meditation.

How does meditation work?

Thus far, most research has focused on the first-order question, does meditation work? Now attempts are being made to answer the second-order question, how does meditation work? Three kinds of explanations have been proffered: metaphoric, mechanistic and process-oriented. Traditional contemplative explanations are usually metaphoric. Classic metaphors include purifying the mind of toxic qualities; freeing it of illusions and

conditioning; awakening it from the usual trance; and healing pathology (Walsh, 1999). Suggested psychological mechanisms include relaxation; exposure; desensitization; catharsis; and counter-conditioning (Murphy & Donovan, 1997). One important process that may be central to both meditation and psychotherapy is that of refining awareness, which may incorporate and facilitate both mechanistic and metaphoric processes. Others include cognitive mechanisms such as insight, self-monitoring; selfcontrol; self-acceptance; and self-understanding (Baer, 2003).

Other authors like Shapiro et al (2006) proposed that in order to understand how mindfulness works, it can be broken down in to simple, comprehensible constructs known as axioms or the building blocks of mindfulness. In that, they used an often cited definition of mindfulness by Kabat-Zinn, (1994) "- paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" According to them, these three elements: 1. "on purpose" or attention; 2. "Paying attention" or attention; 3. 'In a particular way" or attitude - embodies the three axioms of mindfulness. The role of intention in meditation practice is that as meditators continue to practice, their intention shift along a continuum from self-regulation, to self-exploration, and finally self-liberation. Paying attention involves observing of one's moment internal and external experiencesmoment-tosuspending all the ways of interpreting experience and attending to experience itself. How we attend, the qualities one brings to attention have been referred to as the attitudinal qualities of mindfulness. Rather than be immersed in the drama of our personal narration, or life story, we are able to stand back and simply witness it. This intentionally attending with openness and non-judgmentally leads to a significant shift in perspective, which they called *Reperceiving*.

The way forward – paradigm shift in health care in Bhutan

As Bhutan's economy develops further and its society becomes increasingly consumer-oriented, the market economy will dictate demand and supply. This will affect health services as well: Not only will many people be able to pay for health care services, but they also will demand quality services.

I believe that many Bhutanese who are dissatisfied with our present system of health care are among those who have seen better-developed systems abroad and are able to pay for such services. This group neither has the time nor patience to wait for services, nor do they have much regard for the providers. Nonetheless, some use their influence to consume а disproportionately large portion of a doctor's time and services, depriving ordinary citizens of their share. One way to resolve this disparity and dissatisfaction is to provide private health services, so that these clients can go to the private sector for health care, where they can choose a doctor of their choice, at their convenience. Privatization of health care will become a reality, and quality of care will improve with the advent of competition. The revenue generated from the private health sector can then be used to improve the quality of the public health sector, and the Government can concentrate on providing quality care to the poorer sections of society while regulating health care standards in the private sector.

As a result of market forces, an inevitable paradigm shift in the provision of health services will occur, with a bio-psychosocial model and optimal healing environment (Schmidts, 2004) replacing a traditional medical model of care. Similarly, services will become patient- rather than doctor-centered. This new medical paradigm, promoting awareness, healing and transformation at the deepest level of body and mind, heart and spirit for patients and their families, will offer therapy as a collaborative effort between therapist and patient. Patients can

take lead role in solving their health problems, while the therapist's main responsibility will be to facilitate the healing process by educating, encouraging and empowering clients/patients. Multi-disciplinary health provider team consisting of doctors, nurses, psychologists, social workers and other therapists will find an increasing role in this new approach. It is not always necessary that doctors and nurses have to provide all the treatment. Experiences from Western countries show that other categories of professionals such psychologists and social workers can not only provide effective treatment when working in a multi-disciplinary team, they can also reduce costs by reducing doctors' time with patients.

Likewise, Buddhist practice will undergo major changes as the number of educated Bhutanese increase and their approach to Buddhism become more analytical and intellectual. Buddhist practices will become more individual and contemplative, and less dependent on monks performing traditional rituals and rites. Demand for highly qualified contemporary teachers adept in both Buddhist practice and Western analytic enquiry will increase, while demand for ordinary and lay Buddhist practitioners will decrease. Again, meditation practice will find increasing relevance in this new environment.

I believe that our monastic community also will need to evolve with changing times, transforming themselves in such a way so that they remain highly revered and relevant to the young generation of Bhutanese, who are growing up amid television, mobile communications and internet. It is not sufficient for our monks to just meditate or to perform religious rites in today's world, given that the competitive forces of the market economy, increasing materialism and globalization are overwhelming. I would propose that a new cadre of monks be raised who are educated in both mainstream Buddhism and modern education, to provide what I call "socialized Buddhist service," which goes beyond the traditional monk roles. This new front of Buddhist

masters should engage in teaching Buddhism to our young generation; in treating and caring for patients, especially the terminally ill; and in supporting the poor and needy, filling the much-needed role of social service providers in the modern era.

Teaching meditation practice to laypeople should be a vital tool for these modern monks. Practicing mindfulness meditation is a simple process, requiring only dedication. Any individual can learn it from an instructor; although the techniques are inherently Buddhist in origin, one need not become a Buddhist to practice it. Moreover, it can be practiced anywhere and everywhere; there is no need for special infrastructure or logistics. Likewise, there is no cost to this effective therapeutic process. It is sustainable and everlasting, and once an individual acquires the right techniques, one can use it for a lifetime, mitigating the stressors of the modern world and healing and preventing mental disorders.

Conclusion

If our monastic institutions and monks help, we can propagate this practice so that every Bhutanese will have not only an opportunity to practice meditation and achieve lasting peace and happiness in their own lives – but also, potentially, an opportunity to achieve the greatest goal of all, freedom from rebirth. Not only that, they can be instrumental in spreading the word of the Buddha and finding a balance between material desires and inner peace in this increasingly globalized and materialistic world.

Likewise, traditional healers can play a significant role if they can improve on their services and establish evidence-based efficacy of their treatment methods. It is inevitable that the demand for quality health care will increase, and with that, the costs of care as well. The private sector can play a major role in providing quality health care services to those who can afford to pay or buy health

insurance, while the public sector health providers can concentrate on those who are poor and cannot afford to pay. Finally, the health care providers can no longer remain complacent and must embrace evidence-based, holistic bio-psychosocial health care through a multi-disciplinary team approach. The benefits of all this can be enormous, and can embed Gross National Happiness even further in the Bhutanese psyche.

Bibliography

Alexander, C. & Langer, E. (1990). Higher stages of human development. New York. Oxford University Press. Alexander, C.N., Rainforth, M.V. & Gelderloos, P. (1991). Transcendental Meditation, self-actualization and psychological health. Journal of Social Behaviour and Psychology, 57.950-964 Andresen, J. (2000). Meditation meets behavioural medicine. Journal of Consciousness Studies, 7. 17-74 Astin, J.A., Shapiro, S.L., Lee, R. A., Shapiro, D. H. (1999). The construct of control in mind-body medicine: implications for healthcare. Alternative Therapy Health Medicine, 5(2):42-7 Baer, R. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. Clinical Psychology: Science and Practice, 10, 125-143 Baer, R. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. Clinical Psychology: Science and Practice, 10. 125-143 Brown, K.W., Ryan, R. M. (2003). The benefit of being present: Mindfulness and its role in psychological well-being. Journal of Personality and Social Psychology, 84(4), 822-848

Canter, P. & Earnst, E. (2003). The cumulative effect of Transcendental meditation on cognitive function: A systemic review of randomised control trials. *Wiener Klinische Wochenschrift*, 115, 758-756

Carlson, L. E., Speca, M. Patel, K.D. & Goodey, E. (2003). Mindfulness-based stress reduction in relation to quality of

life, mood, symptoms of stress and immune parameters in breast and prostatic cancer outpatients. *Psychosomatic Medicine*, 65, 572-581

Davidson, R.J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S.F. et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65. 564-570

Diullbeck, M.C., Assimakis, P.D. & Raimondi, D. (1996). Longitudinal effects of the Transcendental Meditation and TM-Sidhi program on cognitive ability and cognitive style. *Perceptual and Motor Skills, 62.* 731-738

Emavardhana, E. & Tori, C.D. (1997). Change in self-concept, ego defense mechanisations, and religiosity following seven-day Vipasanna meditation retreat. *Journal for Scientific Study of Religion, 36*. 194-206

Groves, P., & Farmer, I. (1994). Buddhism and addictions. *Addiction Research*, 183-194

Kabat-Zinn, J. (1990). Full catastrophe living. New York. Delacorte.

Kabat-Zinn, J. (2003), Mindfulness-based interventions in context: Past, present and future. *Clinical Psychology: Science and Practice*, 10, 144-156

Kabat-Zinn, J. (2005). Coming to our senses. New York. Hyperion

Kabat-Zinn, J., Massion, A.O., Kristeller, J., Peterson, L.G., Aetcher, K.E., Pbert, L., Lauderking, W.R., Santorelli, S. F. (1992).
Effectiveness of meditation-based stress reduction programme in the treatmet of anxiety disorders. *American Journal of Psychiatry*, 149(7). 936-943

Kjaer, T.W., Bertelsen, C., Piccini, P., Brooks, D., Alving, J., & Lou, H.C. (2002). Increased dopamine tone during meditationinduced change of consciousness. *Cognitive Brain Research*, 13. 255-259

Lazar, S.W., Bush, G., Gollub, R. L., Fricchione, G.L., Khalsa, G., & Benson, H. (2000). Functional brain mapping or the relaxation response and meditation. *Neuroreport*, *11*. 1581-1585

- Marlatt, G.A., & Witkiewitz, K. (2002). Harm reduction approaches to alcohol use: Health promotion, prevention, ad treatment. *Addictive Behaviours*, 27. 867-886
- Ministry of Health, Royal Government of Bhutan. (2000). National Health Survey (NHS) Report.
- Ministry of Health, Royal Government of Bhutan. (2008). Century of Progress in Health: A Journey with the kings. *Annual Health Bulletin*, 1.5. 23
- Ministry of Home and Cultural Affairs, Royal Government of Bhutan. (2005). Population and Housing Census of Bhutan (PHCB) Report.
- Murphy, M. & Donovan, S. (1997). The physical and psychological effects of meditation (2nd ed). Petaluna, CA: Institute of Noetic Sciences
- Murphy, M. & Donovan, S. (1997). The physical and psychological effects of meditation. (2nd ed). Petaluna, CA: Institute of Noetic Sciences.
- National Statistical Bureau (NSB), Royal Government of Bhutan. (2008). Unpublished report.
- Nidch, S.I., Rynarz, R.A., Abrams, A., Orne-Johnson, D.W. & Wallace, R.K. (1983). Kohlbergian cosmic perspective response. EEG coherence and the TM and TM-Sidhi program. *Journal of Moral Education*, 12. 166-173
- Schmidts (2004). Mindfulness and healing intention: concepts, practices, and research evaluation. Alternative Complementary Medicine, 10 suppl. 1, 57-14
- Schneider, R.H., Alexander, C.N., Staggers, F., Orme-Johnson, D.W., Rainforth, M., Saleno, W. et al. (2005). A randomized control trial of stress reduction in African American treated for hypertension for over one year. *American Journal of Hypertension. 18.* 88-98
- Segal, Z., Williams, J.M.G., & Teasdale, J. D. (2002). Mindfulnessbased cognitive therapy for depression: A new approach to preventing relapse. New York: Guilford Press.

- Shapiro, S.L., Carlson, L.E., Astin, J.A., Freedman, B. (2006). Review article: Mechanisms of Mindfulness. Journal of Clinical Psychology, 62(3), 375-386
- Shaprio, S., Schwartz, G. & Bonner, G. (1998). Effect of mindfulness-based stress reduction on medical and premedical students. Journal of Behavioural Medicine, 21. 581-599
- So, K. & Orne-Johnson, D. (2001). Three randomised experiments on the longitudinal effects of Transcendental Meditation technique on cognition. *Intelligence*, 29. 419-440
- Tloczynsk, J. & Tantriells, M. (1998). A comparison of the effect of Zen breath meditation or relaxation on college adjustment. *Psychologia*, 41. 32-43
- Travis, F., Arenander, A. & DuBois, D. (2004). Psychological and physiological characteristics of a proposed charactieristcs of a proposed object referral/self referral continuum of self awareness. *Consciousness and Cognition*, *13*. 401-429
- Walsh, R. (1999). *Essential Spirituality: The seven central practices*. New York. Wiley
- Walsh, R. (2005) Can synthesia be cultivated? *Journal of Consciousness Studies*, 12. 5-17
- Weisbecker, I., Salmon, P., Studts, J.L., Floyd, A.R., Dedert, E.A. & Sephton, E. (2002). Mindfulness-based stress reduction and sense of coherence among women with fibromyalgia. *Journal* of Clinical Psychology in Medical settings.9. 297-307
- William, A., Kolar, M.M., Reger, B.E. & Peterson, J.C. (2001). Evaluation of wellness-based mindfulness stress reduction intervention: A controlled trial. *American Journal of Health Promotion*, 15. 422-432
- World Health Organization (WHO), World Health Report, 2001.
- Zamarra, J.W., Schneider, R.H., Bessighini, I., Robinson, D.K. & Salerno, J.W. (1996). Usefulness of the Transcendental Meditation program in the treatment of patients with coronary artery disease. *American Journal of Cardiology*, 78. 77-80

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