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Stock Market Finance and Gross National Happiness: An Institutional Fit? Evidence from Bhutan

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Abstract

This paper studies the institutional fit and the appropriateness of neoclassical stock market institutions within the context of Buddhist informal institutions in the Himalayan Kingdom of Bhutan. This is particularly timely given the considerable media interest in the principles of Gross National Happiness (GNH) as an alternative series of measures relating to economic growth and development. Our findings reveal that while conventional development policy supporting stock market and banking system financial systems is not counter to the principles embodied in GNH the central government may be better in administering finance owing to a general apathy towards formal neoclassical institutions by the population owing to the dominance and pervasive strength of the Buddhist monastic traditions and culture in Bhutan.

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Introduction

There is considerable interest amongst policy-makers in smaller developing economies in adopting institutions that will facilitate economic development and increase prosperity. A centrepiece of modern development policy is the role of a markets-based system and specifically the establishment of stock exchanges that facilitate the raising of much needed development capital for domestic industrial growth and provide investors and capital issuers with risk diversification opportunities. Development policy centring on the establishment of stock markets focuses on their purported benefits as defined by neoclassical economics. However this commonly does not take into account the institutional matrix of the indigenous society and how compatible their institutions and social values are with those of stock markets. This possibility defines the likely level of successful adoption of a markets-based financial system.

The establishment of a securities exchange in Bhutan is particularly interesting as a focus of study given the unique cultural and institutional structure of Bhutanese society which is largely expressed through the principles embodied in the concept of Gross National Happiness (GNH). While this concept was first introduced in 1972 by Jigme Singye Wangchuck, it has received considerable worldwide media attention (Braun et al (2009); Sinha (2004); the Centre for Bhutan Studies (2009a)) as an alternative measure of national performance to the Gross Domestic Product (GDP) measure traditionally associated with economic performance. Furthermore Bhutan has embraced the four major principles behind GNH, namely equitable economic development, environmental preservation, cultural resilience and good governance, at the core of national development policy (Centre for Bhutan Studies, 2009b). The broader and more holistic concept of GNH has underscored development policy in Bhutan while leading to a wider debate in the development community regarding the beneficial impact of these principles

in the effective measurement of institutional development worldwide (Braun et al (2009); Centre for Bhutan Studies (2009a, 2009b)).

Bhutan is largely distinct in practicing the Mahayana strain of Buddhism which is more closely associated with ancient Tibetan Buddhism in contrast to the more modern Theravada version that is dominant in Thailand and Sri Lanka (Lewis (1996); Dorji (2008); Keown (2005); Rose (1977)). As such the informal institutions which govern the society in defining behavioural norms and values (North (1990); Williamson (1996)) have an especially strong focus on moral discipline, cultivation of virtue and altruistic conduct as well as a doctrine of non-violence towards all sentient beings including humans and animals reinforced by a powerful role accorded to monastic life within society (Braun et al (2009); Dorji (2008); Keown (2005); French (2002)). Furthermore the distinctive institutional environment of Bhutan has largely shaped by a reluctant need to reform and modernise political and economic apparatus with the transplanting of modern, albeit largely Indian common law, institutions (Joireman (2006); Sinha (2004); Rose (1977); Nishimizu (2008)) while preserving the integrity of indigenous Buddhist culture (McDonald (2005); Sinha (2004); Nishimizu (2008)). As a consequence the business environment is largely dominated by conglomerates with significant levels of government ownership and control, where government itself is defined as an extension of the monastic institutions, as well as numerous smaller family firms (Sarkar and Ray (2007); Sinha (2004); Leo (1977)). As a consequence this study is focussed to addressing the research question as to whether the neoclassical development policy promoting stock market development is appropriate within a societal matrix defined formally by GNH and the informal institutions of Buddhism and the monastic political economy.

This paper proceeds as follows. Section 2 reviews the literature relating to economic growth and finance and the smaller research area of Buddhist institutional economics. Section 3 provides a discussion on South Asian regional markets which leads to Section 4 focussing on the evolution, structure and characteristics of the Bhutanese capital markets. A discussion of the constraints to stock market development is undertaken in Section 5 with Section 6 concluding.

Literature Review

Much of the development policy literature relating to the impact of financial intermediaries in the economic development of developing countries is centred on neoclassical economics. However while this does explicitly account for transactions costs it does retain core assumptions of the invisible hand in terms of the coordinative efficiency of the market mechanism first envisaged by Adam Smith that facilitates specialization of economic activity, technological and capital accumulation and economic growth (see Adam Smith (1776) and the *Wealth of Nations*). Schumpeter (1912) embodies these concepts in outlining his vision of development based on well developed financial intermediaries in facilitating entrepreneurial activity in developing countries. Consequently well developed financial intermediaries were deemed to foster technological innovation through their ability to mobilize savings, monitor firm managers, evaluate projects, manage and pool risks and facilitate trade transactions. Development through the promotion of an entrepreneurial class in developing societies was deemed to enable economic growth through technological, human and social capital accumulation which would be felt across wider society by its diffusion due to industrial growth and mass employment. Early criticism of development policy centred on these concepts came from Rimmer (1961) through the observation that technological diffusion in developing countries is largely government

facilitated and consumption-orientated as opposed to genuine creation of human and social capital engendered by novel innovative activity. The now burgeoning finance-economic growth literature has focussed on the role ascribed to financial intermediaries by Schumpeter which has led to a wider debate with polarised opinions. Meier and Seers (1984) deemed finance as an irrelevance while Joan Robinson (1952) cited finance as following enterprise development. However a more liberal approach is adopted by Gurley and Shaw (1955), Goldsmith (1969) and McKinnon (1973) in ascribing a role for finance in growth while being largely inconclusive regarding the nature of the financial institutions themselves. Consequently proponents of bank-based financial intermediation cite the benefits of the longer-term relationship focus as opposed to short-term profit incentives of shareholders (Schleifer and Vishny, 1997) and protection from hostile takeovers and the necessity of employment of costly defensive measures arising in a market-based system (DeAngelo and Rice, 1983). Banks are also well positioned to provide optimal inter-temporal risk sharing services that exert benefits on resource allocation (Allen and Gale, 1997 and 2000). In contrast proponents of market-based systems argue that banks exert too much control and leverage over firms leading to a sub-optimal allocation of resources (Hellwig (1991); Weinstein and Yafeh (1998)). Black and Moersch (1998) argue that the long term relationship of banks and protection of firms from the discipline of the market actually supports inefficient managers and stymies potential technological innovation. A third strand of this finance-growth literature emphasises the mutually reciprocal nature between banks and stock markets. In general arguments supporting bank-based systems are based on the merits of banks providing inexpensive basic risk management services for standardized situations they tend to lack the flexibility that market-based systems possess in tailor-making financial products. Furthermore Levine (1991) and Bencivenga et al (1996) find evidence that the effectiveness of stock market-based systems is dependent on liquidity rather than size, or

market capitalization further emphasising the mutual interdependence between banks and stock markets.

While there is considerable evidence of the effect of finance on growth (Eschenbach, 2004) this is generally from cross sectional panel studies as opposed to from the application of time series techniques. However the models developed in the growth literature for the most part do not take into account the effects of income distribution and levels of prevailing poverty (Levine, 2005). (This is an important point. Has there been any literature on ecological impacts or on public health as well? I seem to recall that possibility.) This has spawned a more recent literature centring on political economy and wealth distribution effects though there are conflicting viewpoints as to the benefits arising from financial development. Authors such as Banerjee and Newman (1993), Galor and Zeira (1993) and Aghion and Bolton (1997) view the innovative nature of financial development as exerting substantial benefits on the poor where improved access to financial services and products reducing informational asymmetries that exist facilitate capital flow to otherwise wealth-deficient entrepreneurs. However in contrast authors such as Lamoreaux (1986) and Haber (1991) cite that access to finance is a critical determinant of the early stages of enterprise development and is largely constrained to the limits of the political economy and those who have political connections. As such those with connections are those who are able to achieve finance thereby realizing entrepreneurial opportunities, technological innovation and capital accumulation thus further propagating the disparity in income and wealth distribution in society.

While much of development policy is rooted in the principles of neoclassical economics which itself has evolved into an explicit attempt in incorporating the costs of transacting with incomplete information such as Nash equilibrium and Game Theory (Nash, 1951) a separate literature regarding the role of institutions in mitigating transactions costs has developed.

This has evolved from its core focus of the basic unit of analysis being the transaction (Commons, 1934) and is primarily concerned with the institutional governance of the agent's party to the transaction. This governance apparatus is essential for mitigating potential opportunism in agent behaviour and in minimising informational search and verification costs and typically relies on both informal as well as formal institutions. The former is defined as the deeply embedded values and behavioural norms within a society which is reflected in language and culture (Williamson, 2000) while the latter is more legally defined codes and formal governance directives that can be changed and redefined comparatively quickly (North (1991); Williamson (2000)). The New Institutional Economics (NIE) literature argues that economic development is associated with a higher frequency of more complex transactions bearing greater asset specificity and it is only the presence of well-defined and effective institutions, both formal and informal, which ensures that firms are willing to engage in more frequent and higher risk transactions over time (North (1990, 1991); Williamson (1996)). Furthermore the NIE agenda seeks to overturn the neoclassical concept of instrumental rationality, i.e. that myopic self-interested agents act in rational utility maximising manner (Williamson, 2000). However North (1991) cautions that there is no guarantee that the rigid institutions established to impose constraints on human interaction will themselves be efficient although they serve a social purpose in the light of human agents inability to process all available information and in a world of incomplete contracting. This results in human agents relying on deeply embedded societal institutions in the form of religion, behavioural norms, values and ideologies in governing interactions with other agents. In a zero-transaction cost world bargaining strength does not affect the efficiency of outcomes, while the opposite is true when costs exist and this shapes the direction of longer term political economy and economic development. This leads to the development of the concept of path dependence and the relationship between

politics and economy owing to network externalities, economies of scope and complementarities that exist within a given institutional matrix (North, 1991). North (1991) argues that this in turn defines economic development.

The Buddhist monastic economy of Bhutan is distinctive in having only very recently opened itself to the outside world through the selective transplanting of economic and political institutions primarily from the common law countries of India and UK. While this has preserved much of the deeper societal level informal institutions it has been further enforced through the national adoption of the GNH at the core of government development policy which was developed primarily as a defensive reaction against global neoclassical modernization agenda and capitalism (Braun et al, 2009). However GNH policy directives despite their universal adoption represent only the highest level of governance institutions as defined by Williamson (2000) while the deeper more pervasive monastic culture enforcing altruism and notions of wider spiritual identity are more formative in the Bhutanese societal matrix.

Buddhism is fundamentally different from many of the world's other religions in holding to a proposition of destiny after life as leading to either heaven or hell. Rather life itself is a transient metaphorical state within an ongoing sequence of reincarnations and re-births. An individual's transition through rebirth and their destiny is determined by their level of karma which from physical human birth is deposited in the human heart (atman) (Lewis (1996); Dorji (2008); Keown (2005); French (2002)). Buddhism also opposes the idea of a soul, is very individualistic, is focused on unity versus dualistic opposites and is based on impermanence of reality. Social justice is enforced by the needs of an individual to behave in a manner that will benefit both the individual and society in order to boost levels of karma both for themselves and also for those immediately related whose own level of karma is affected by the individual. Furthermore a critical

issue for Buddhist devotees is the necessity to achieve enlightenment which happens through addressing Four Noble Truths within an Eightfold path. The Four Noble Truths include all existence is suffering, suffering is caused by craving, suffering can have an end, and the way to end suffering is through the Eightfold path. The Eightfold Path includes Right View, Right Resolve, Right Speech, Right Action, Right Livelihood, Right Effort, Right Mindfulness, and Right Meditation. Acts following the Eightfold Path include Dana or giving or generosity. It also includes Ahimsa or non-harming or non-violence and compassion embodied by all school of Buddhism but particularly the Mahayana school. Compassion includes loving kindness, compassion, sympathetic joy, and equanimity. As a consequence the ultimate destiny for Buddhist devotees is the state of Nirvana, which is often only attainable after many rebirths and subsequent spiritual purity once there is no karma remaining in the human being (Lewis (1996); Dorji (2008); Keown (2005); Rose (1977)). It is these more pervasive beliefs upon which the informal institutions in Bhutanese society are founded. While they act as a source to inform GNH policy directives they are more embedded due to the generic nature and universal applicability of the GNH principles that by design are more generalisable in application to a wider global audience. Under GNH, for example, there is an expectation to balance the by encouraging the development of the spiritual requirements of the individual with material requirements such as adequate health care, environmental protection, and equitable wealth and income distribution.

South Asian Stock Markets

South Asian exchanges

The major stock markets across South Asia are linked by membership to the South Asian Federation of Exchanges (SAFE), which acts to promote regional initiatives such as the gradual harmonization of accounting and governance standards. However while both Dhaka and Chittagong exchanges in Bangladesh and the exchanges of Lahore, Islamabad and Karachi in Pakistan are SAFE members, membership is restricted to only the two largest Indian exchanges, namely Bombay and the National Exchange despite the presence of 24 smaller exchanges spread throughout India. In addition while many South Asian societies are strongly influenced by deeply embedded religious beliefs, such as Islam in Pakistan and Hinduism in India, that characterize informal institutional development the markets of Sri Lanka and Bhutan are distinct in their adherence to Buddhist beliefs and institutions owing to sizeable Buddhist populations (see Table 1).

While the South Asian region has some of the largest stock exchanges in the world in absolute terms, such as that of Bombay with 4,921 listings, the size in relation to the overall economy (GDP) which provides an indication of the stock market's importance in business financing tends to be very low and with the exception of Bombay (53.16%) and India's National Stock Exchange (46.69%) are generally substantially lower than 20%. Furthermore liquidity levels, indicated by turnover ratios, are very low and generally much lower than 20% with the sole exceptions of Bangladesh's Dhaka (63.99%) and India's National exchanges (95.02%). Generally the evidence in Table 1 suggests that while development policy across South Asia is focussed on the establishment of stock markets and their attraction of listings that they remain comparatively small in size and low levels of activity inferring

that business finance is sourced from internal means or from relationship based banking sectors. Table 1: See appendix.

The Royal Securities Exchange of Bhutan

The Royal Securities Exchange of Bhutan (RSEB) was established in October 1993 as a non-profit making entity with four licensed broker members and the Royal Monetary Authority (RMA) of Bhutan acting as a securities exchange commission, or de-facto regulator. The mission statement of the RSEB states the essentially neoclassical institutional development goals for the exchange to play an integral part of the financial system and for the development of a transparent, orderly securities market with the efficient mobilization and allocation of capital (RSEB website, 2010a)

The original establishment of the exchange was motivated by the need to create an active capital and money market within the kingdom and was facilitated through the donation of technical assistance of the Asian Development Bank (ADB). Bhutan's economic development policy is guided by its philosophy of GNH that is predicated on the four pillars of sustainable economic development, cultural preservation, environmental protection, and good governance (RGB, 2010). The development and restructuring of institutions supporting the RSEB has been undertaken in 2009/2010 in order to improve the operational efficiency of the market with this policy fitting within the concepts of economic growth and promotion of good governance envisaged in GNH (RGB, 2010). Notably training of RSEB, RMA and broker personnel has been undertaken in other Buddhist influenced markets such as the stock exchanges of Thailand, Sri Lanka and Singapore (ADB technical assistance report, 1995). Trading is automated in an order-driven system but in line with limited demand and activity is limited to Tuesday and Friday from 11am while a central depository housed in the exchange premises has managed to achieve almost fully dematerialised trading in the market (RSEB website, 2010). Since the

relatively recent creation of a Bhutanese national currency, the Ngultrum, this has had a fixed peg relationship with the Indian Rupee mitigating foreign currency exposure between the two countries and greatly facilitating cross-border exports from the small open economy. Bhutan also never had a colonial relationship with a foreign metropole although it was considerably influenced by British colonial institutions in neighbouring India, which is exemplified with British mediation in the 1904 to 1907 political transition from Buddhist theocracy to hereditary monarchy. As a direct consequence it has had many of its modern institutions transplanted from neighbouring India, Thailand or from the ADB which have taken the form of English common law legal codes prevalent across the South Asian region.

Corporate governance and regulation is undertaken through the combination of the Bhutan Companies Act 1989, Financial Institutions Act 1992 and active surveillance and regulatory enforcement by the RMA under a self-regulatory system (RMA website, 2010). However despite the political will motivating the drive to modernization in a country that only fully established a monetized economy in the 1960's much of the population retains deeply conservative Buddhist values that underpin a collectivist culture. This in turn is reflected in widely held altruistic economic motives of individuals based in the doctrine of GNH (Centre for Bhutan Studies (2009a, 2009b)). These issues are highlighted in the evidence from Table 2 where primary market activity of the RSEB is minimal with the only very occasional issue of rights and bonus issues of shares and a largely static number of listed firms from 2000 to 2008. The limited use of the RSEB in attracting new listings and as a source of capital is further highlighted in the overwhelming dominance of primary market activity by government debt, in the form of either RMS Bills or Government debt with only two debt issues by the parastatal Druk Air in 2003 and 2004.

Given the static nature of the exchange and its limited participation in economic activity the market capitalization to GDP ratio is commonly between 11 and 15% and the comparative dominance by the banking system is shown in the low ratios of market capitalization to money-plus-quasi money which are generally between 22 to 30%. The lack of liquidity in terms of trading activity is shown through the minimal traded value to market capitalization ratios of under 1% which would be intuitively expected given the indications of minimal demand for stock market products from extremely low levels of institutional savings in relation to GDP of under 12%. However the lack of order flow is also due to legal prohibition of foreign ownership of Bhutanese firms thereby placing greater emphasis on the involvement of meagre domestic institutional investors to boost liquidity. However there is evidence that this isolationist policy is changing through the recent establishment of India's Druk Punjab Bank in January 2010 with the explicit goal in attracting a greater proportion of foreign investment (American Public Media, 2010). However while institutional savings levels are minimal, which is largely a reflection in the only very gradual inclusion of the wider population in pension schemes the considerably higher savings to GDP ratio of between 20 and 30% is more reflective of the successful monetization of the economy and increased levels of adoption of bank accounts and familiarity with financial services products by general population. These statistics would indicate the relative strength and development of the banking system in contrast to the relative underdevelopment of a markets-based economy. Table 2: See appendix.

Further evidence relating to the cultural inhibitions arising from inherently collectivist cultures with well-defined social and cultural beliefs in relying on external stock market finance as a source of capital can be seen from Table 3. This shows that ownership of firms in the Bhutanese market is dominated by block shareholders in the form of government or promoters, otherwise known as corporate insiders or

corporate block-shareholders. The majority of shareholders in the public domain are characterised as either local financial institutions or local institutional investors, namely the national insurance company and national pension fund. However despite the very low levels of trading activity as evidenced earlier from Table 1 the proportions of free float market capitalization, or shares available in public domain, is very high for small developing markets and generally over 30% for all stocks bar three – namely those of Bhutan Dairy & Agro Products, Druk Petroleum Co and Bhutan Times Ltd which are less than 20%. Overall these results would indicate that the Bhutanese market on the surface shares many of the characteristics of other very small markets (Hearn and Piesse, 2009) where ownership is largely dominated by corporate insiders or block-shareholders owing to poorly defined property rights governing the transactions (Boulton et al, 2009). While much of the rural population would be unable to access the stock exchange or even more general financial services the almost complete lack of information on the exchange's activities with the website only having been completed in 2009 infers transactions costs, in the form of search and verification, are substantial. In part due to these issues the financial transactions amongst the indigenous population are governed by informal institutions defining the culture, values and behavioural norms inherent in the ancient monastic Buddhist traditions that is also manifest in the doctrine of GNH (Centre for Bhutan Studies (2009a, 2009b)). This is further reflected in Table 3 as those firms with higher free float percentages and thus higher levels of ownership in public domain also have higher absolute numbers of shareholders reflecting that the need for enhanced control is not so much of a concern for the listed entities. Equally given the strength of informal institutions that characterize the business environment the implications for corporate governance are significant in reducing agency costs between principals (owners) and incumbent management (agents). As such corporate governance largely relies on the concepts of corporate stewardship reflecting

these common shared values (Hofstede (1980); Huff and Kelley (2003)). (One implication of the restrictive investment policy of Bhutan is that it has historically been isolated but also that it is keen on protecting cultural values through the institution of GNH and other restrictive and protectionist laws.) Table 3: See appendix.

Constraints to market development

The previous section highlighted that the stock market does not operate efficiently largely due to poorly defined property rights and an apathetic investor base itself made up from a small urban population with sufficient disposable income to act as savings. This section further elaborates on a number of limitations constraining market development and outlines why essentially neoclassical market-based development institutions are superfluous in a society dominated by informal Buddhist institutions oriented toward GNH.

Difficulties in supply of investment opportunities

The evidence from Table 4 reveals that as intuitively expected the very small largely inactive stock market is only a minimal source of finance for domestic firms through new equity issues, which include IPOs, rights and bonus issues of shares, in contrast to the commercial lending from the banking sector. However the amount of commercial lending itself is only 2 or 3 times greater than the tiny amount raised through new equity issues and is itself severely constrained by excess liquidity and a proportion of non-performing loans to total loan amounts as high as 12% per year (RMA Annual report, 2008). This provides some indication of the difficulties of the existing banking model of development finance in both accessing the wider population while itself falling victim to being largely alien to the indigenous informal institutions that are best suited to administer finance effectively. The overwhelmingly dominant source for business finance in Bhutan is from loans administered by government, the

financing of which has to a large degree come from being recipient to overseas aid flows. The dominant role of India in terms of trade and economic relations can be seen in terms of the majority of aid financing in the other investment category originating from this single country. However despite the close links between the two countries India provides only a minimal amount of foreign direct investment (FDI) in Bhutan with the majority coming from either regional or overseas sources which are primarily Indian. Portfolio finance is minimal with the value of US\$ -18.34m in 2001 being attributable to investment in US stock markets. Equally no corporate debt was issued in Bhutan with the two values of US\$ 25.55m and US\$ 21.88m having been raised by the parastatal national airline Druk Air in order to part finance acquisition of new fleet. The overall evidence from Table 5 is largely unique in small developing countries where banking systems tend to dominate stock markets in the domestic provision of business finance. In the Bhutanese case the government is the principal source of finance with FDI a distant second place and the banking sector trailing a long way behind. This provides the strongest evidence of unusual cultural features of Bhutan where external finance is not favoured and industrial development is largely driven by government intervention. Table 4: See appendix.

Table 5 provides evidence regarding the listed firms on the Bhutanese exchange. The lack of activity is reflected in the age of the listings themselves with 13 of the 19 listed firms having been listed since the mid 1990's. The market capitalization profile of the exchange is skewed with 4 firms alone accounting for over 77% of market capitalization. However this becomes even more concentrated in terms of trading activity and traded value where 2 firms account for 87.14% of traded volume and 89.05% of traded value. As a result of these issues the debt to equity ratio of many firms is high while the cost of equity estimated from accounting book

data using the Gordon and Shapiro (1956)¹ dividend capitalization method is extremely high providing strong evidence of the exchange in being an ineffective source of external finance. Costs of equity are particularly high for firms engaged in mining reflecting the higher risks from extractive related industrial projects such as Jigme Mining Corporation and S. D. Eastern Bhutan Coal Company Ltd. However given such costs of equity that are used to discount expected cash flows arising from industrial development projects the stock exchange is an uncompetitive source of external finance for firms. This provides further support for the earlier evidence from Table 5 where government loans and FDI were found to be the dominant sources of external finance. It is also particularly revealing about the potential extremely limited impact of capital markets finance in the modernization process of a Buddhist monastic economy in a staunchly collectivist society. Table 5: See appendix.

Limited diversification and demand for investment opportunities

The institutional investment community in Bhutan is largely confined to the National Pension and Provident Fund and the Royal Insurance Corporation of Bhutan. The evidence from the first panel of Table 6 reveals that levels of institutional savings as a proportion of GDP are extremely low in the kingdom and commonly less than 12% of GDP. A fundamental difference between Bhutan and most other smaller developing countries is that the core Buddhist social values ensure a strong sense of altruism to permeate all levels of society with emphasis on extended families and the provision of care for elderly family members as well as their continued active role within the core family unit post-retirement (NPPF Annual report, 2008). This is likely to have caused the very slow comprehension of pensions by the wider

¹ See Brealey, Myers and Allen (2008) for a detailed analysis.

population in addition to their being limited in accessing pensions through the necessity of being engaged within the formal sector. Consequently while there has been a considerable increase in the numbers of contributors to the NPPF pension fund most of these are government employees in the civil service or armed forces. Bhutan is also largely unique in having a single institutional pension fund, namely the NPPF, with various government and corporate entities members electing to join.

The evidence in terms of portfolio asset allocation of the NPPF pension fund is revealed in the second panel of Table 6. The national pension portfolio allocated 5% of investment in domestically listed equities in 2004 that dropped to a minimal value of 3% in 2008. This is in stark contrast to the foreign US market investments that were allocated 26% of the portfolio investment funds in 2004 and 2005 prior to liquidation. The majority of non-lending domestic investment is in the form of short and long term cash deposits and Royal Government of Bhutan bonds with only a fraction invested in RMA issued bills. A substantial portion of investment is also undertaken in the form of member and project loans. These notably have a considerably lower proportion of non-performance, typically less than 1.50% as seen in panel 1, which is much lower than the national average for non-performing loans and can be attributed to strong enforcement of loan retribution (NPPF Annual report, 2008). The general picture points towards an embryonic institutional investment industry dominated by one provider, the national pension fund, whose asset allocation in domestically listed equity is generally less than 5% of total invested assets. This would indicate very weak demand for domestic stock exchange products and is a major factor in the prolonged inactivity of the exchange. Table 6: See appendix.

Institutional fit with Gross National Happiness

The creation of a stock market culture is a common policy initiative in many smaller developing countries and often centres on stock market awareness initiatives in secondary and tertiary education institutions in order to engender an understanding amongst the next generation of entrepreneurs (Hearn and Piesse, 2009). However these efforts in promoting the benefits of essentially neoclassical institutions are often wasted in the light of an often apathetic society that is constrained by an institutional matrix promoting governance by informal institutions (North (1991); Williamson (2000)). Commonly essentially European neoclassical institutions are transplanted on indigenous cultures through colonial relationships (Joireman, 2001) or by conscious adoption (North, 1991). However given Bhutan's historical isolationist policy thereby largely preserving its unique culture and promotion of strong informal Buddhist governance mechanisms the societal matrix is at best apathetic to stock-market culture. Nevertheless, Bhutan in 2010 has at least recognized the need to strengthen its stock market to bolster sustainable economic development (including trade), which is one of the four pillars of GNH (RGB, 2010).

Recommendations

This paper investigates the role of stock market financing within Bhutan's business environment characterised by deeply embedded Buddhist informal institutions that have received favourable recent media attention through their having been instrumental in the formulation of the principles of Gross National Happiness (GNH).

This study is timely owing to the universal adoption of stock-markets focussed development policy worldwide and with particular relevance to the issues encountered in smaller markets and those with distinctive indigenous cultures and informal institutions.

While the prohibition of foreign ownership, lack of domestic institutional investors and limitations in accessibility of stock exchange for much of the population act as constraints to market activity the institutional causes for this are significantly different in Bhutan's case than for other smaller frontier stock markets. The historic isolation of Bhutan and prevalence of ancient Tibetan Buddhist religious beliefs perpetuated through the largely monastic political economy forms a strong informal institutional matrix governing transactions and engendering a distinctive economic development. The dominance of these informal institutions reinforces the altruistic and collectivist nature of Bhutanese society causing apathy towards the transplanted neoclassical institutions supporting stock market finance. Government is best placed through the doctrine of GNH to administer the provision of finance. This is in preference to either the banking system or stock market given the unique nature of government in Bhutan where owing to the dominance of monastic culture and informal institutions there is less formal divide between public sector central government and the private sector.

References

- Adam Smith (1776). "An Inquiry into the Nature and Causes of the Wealth of Nations", London: Methuen and Co., Ltd., ed. Edwin Cannan, 1904. Fifth edition. Retrieved via:
<http://books.google.co.uk/books?vid=0cdNHpySvm5-28tL&id=OJIBAAAAQAAJ&printsec=toc#v=onepage&q&f=false> Accessed 1 June 2010
- ADB technical assistance report (1995). "Technical Assistance Report on the Capital market and Stock Exchange", Centre Development to the Kingdom of Bhutan. Asian Development Bank. November 1995. Report No: TCR: BHU 26084
- Aghion P. and P. Bolton (1997). "A Theory of Trickle-Down Growth and Development". *The Review of Economic Studies*, 64(2), 151-172
- Allen F. and D. Gale (1997). "Financial Markets, Intermediaries, and Intertemporal Smoothing". *Journal of Political Economy*, 105(3), 523-46
- Allen F. and D. Gale (1999). "Corporate Governance and Competition". Center for Financial Institutions Working Papers 99-28, Wharton School Center for Financial Institutions, University of Pennsylvania
- American Public Media (2010). "Bank gives Bhutan lifeline to the world". Retrieved via:
<http://marketplace.publicradio.org/display/web/2010/02/02/am-bhutan-banks/>. Accessed 2 June 2010
- Banerjee A. V. and A. F. Newman (1993). "Occupational Choice and the Process of Development", *Journal of Political Economy*, 101(2), 274-98
- Bencivenga V. R., B. D. Smith and R. M. Starr (1996). "Liquidity of Secondary Capital Markets: Allocative Efficiency and the Maturity Composition of the Capital Stock", *Economic Theory*, 7(1), 19-50
- Black S. W. and M. Moersch (1998). "Financial structure, investment and economic growth in OECD countries", in *Competition and Convergence in Financial Markets: The*

- German and Anglo-American Models (S. W. Black and M. Moersch, Eds.) 157–174. North-Holland, New York
- Boulton T. J., S. B. Smart and C. J. Zutter (2009). “IPO underpricing and international corporate governance”. *Journal of International Business Studies*, 1-17
- Braun A. A. and W. Hussain (2009). “Gross National Happiness in Bhutan: A Living Example of an Alternative Approach to Progress”, Unpublished Working Paper, Wharton School: University of Pennsylvania
- Brealey R. A., S. C. Myers and F. Allen (2008). “Principles of corporate finance”. Ninth Edition. New York: McGraw Hill International.
- Centre for Bhutan Studies (2009a). “Gross National Happiness: Practice and Measurement”. The Proceedings of the Fourth International Conference on Gross National Happiness, 24-26 November 2008. Editors: Dasho Karma Ura and Dorji Penjore, Thimphu, Bhutan
- Centre for Bhutan Studies (2009b). “Gross National Happiness Survey Findings: 2007-2008”, Thimphu Bhutan
- CIA World Factbook (2010). “CIA World Factbook”. <https://www.cia.gov/library/publications/the-world-factbook/> Accessed 10 April 2010
- Cochin stock exchange website (2010). “Cochin stock exchange”. <http://www.cochinstockexchange.com/> Accessed 5 March 2010
- Commons J. R. (1934). “The problems of correlating law, economics and ethics”. *Wisconsin Law Review*, 8(1), 3-26
- CSE website (2010). “Colombo Stock Exchange”. <http://www.cse.lk/welcome.htm> Accessed 10 April 2010
- DeAngelo H. and E. M. Rice (1983). “Antitakeover Charter Amendments and Stockholder Wealth”. *Journal of Financial Economics*, 329-359
- Dorji C. T. (2008). “A Concise Religious History of Bhutan”. Delhi: Prominent Publishers, India
- Eschenbach F. (2004). “Finance and Growth: A Survey of the Theoretical and Empirical Literature”. Tinbergen Institute Discussion Paper No. TI 2004-039/2

- French R. (2002). "The Golden Yoke: The Legal Cosmology of Buddhist Tibet", Second Edition. Ithaca: Snow Lion Publications
- Galor O. and J. Zeira (1993). "Income Distribution and Macroeconomics". *Review of Economic Studies*, 60(1), 35-52
- Goldsmith R. W. (1969). "Financial Structure and Development". New Haven: Yale University Press
- Gordon M. J. and E. Shapiro (1956). "Capital equipment analysis: the required rate of profit". *Management Science*, 3, 102-110.
- Gurley J. G. and E. S. Shaw (1955). "Financial Aspects of Economic Development". *The American Economic Review*, 45, 515-538
- Haber S. H. (1991). "Industrial Concentration and the Capital Markets: A Comparative Study of Brazil, Mexico, and the United States, 1830-1930". *Journal of Economic History*, 51, 559-580.
- Hearn B. and J. Piessé (2009). "Barriers to the development of small stock markets: A case study of Swaziland and Mozambique". *Journal of International Development*, forthcoming
- Hellwig M. (1991). "Die Kommunikationsfunktion der Finanzmärkte". *Swiss Journal of Economics and Statistics (SJES)*, 127(III), 351-364
- Hofstede G. (1980). "Motivation, leadership and organization: Do American theories apply abroad?" *Organizational Dynamics*, 9(1), 42-63
- Huff L. and L. Kelley (2003). "Levels of organizational trust in Individualist versus Collectivist Societies: A Seven-Nation Study". *Organizational Science*, 14(1), 81-90
- ISE website (2010). "Islamabad Stock Exchange". <http://www.ise.com.pk/> Accessed 10 April 2010
- Joireman S. F. (2006). "The Evolution of the Common Law: Legal Development in Kenya and India". *Commonwealth and Comparative Politics*, 21, 190-210

- Keown D. (2005). "Buddhist Ethics: A Very Short Introduction". Oxford University Press: Oxford and New York.
- Lamoreaux N. R. (1986). "Banks, Kinship, and Economic Development: the New England Case". *Journal of Economic History*, 46, 657-667
- Levine R. and D. Renelt (1991). "Cross-country studies of growth and policy: methodological, conceptual, and statistical problems". Policy Research Working Paper Series 608, The World Bank
- Levine R. (2005). "Law, Endowments and Property Rights". *Journal of Economic Perspectives*, 19(3), 61-88
- Lewis T. T. (1996). "Religious Belief in a Buddhist Merchant Community, Nepal". *Asian Folklore Studies*, 55(2), 237-270
- McDonald R. (2005). "Towards a New Conceptualization of Gross National Happiness and its Foundations", *Journal of Bhutan Studies*, 12, 23-46
- McKinnon R. I. (1973). "Money and Capital in Economic Development". Washington, D.C. Brookings Institution.
- Meier G. M. and D. Seers (1984). "Pioneers in Development". New York: Oxford University Press for the World Bank
- Nash J. (1951). "Non-Cooperative Games", *The Annals of Mathematics*, 54(2), 286-295
- Nishimizu M. (2008). "Portrait of a Leader: Through the Looking-Glass of His Majesty's Decrees". Thimphu, Bhutan: Centre for Bhutan Studies
- North D. C. (1990). "Institutions, institutional change and economic performance". Cambridge: Cambridge University Press
- North D. C. (1991). "Institutions". *Journal of Economic Perspectives*, *American Economic Association*, 5(1), 97-112
- NPPF Annual Report (2008). "National Pension and Provident Fund Bhutan Annual Report 2008". Available at: <http://www.nppf.org.bt/> Accessed 10 April 2010
- Pune stock exchange website (2010). "Pune Stock exchange".

- <http://www.punestockexchange.com/> Accessed 5 March 2010
- RGB (2010). "Royal Government of Bhutan Economic Development Policy of the Kingdom of Bhutan". 2010, Thimphu, Bhutan
- Rimmer D. (1961). "Schumpeter and Underdeveloped Countries". *The Quarterly Journal of Economics*, LXXV
- Rose L. (1977). "The Politics of Bhutan". Ithaca: Cornell University Press
- RMA website (2010). "Royal Monetary Authority of Bhutan". <http://www.rma.org.bt/> Accessed 10 April 2010
- RMA annual report (2008). "Royal Monetary Authority of Bhutan Annual Report 2008". Available at <http://www.rma.org.bt/> Accessed 10 April 2010
- Robinson J. (1952). "Generalization of General Theory". Palgrave Macmillan; 2nd edition (October 1979) RSEB website. 2010a. Our Vision and Mission. <http://www.rsebl.org.bt/pages/subpage.php?pagecode=53&subpagecode=237> Accessed 10 April 2010
- RSEB website (2010b). "The Royal Securities Exchange of Bhutan". <http://www.rsebl.org.bt/> Accessed 10 April 2010
- SAFE website (2010). "South Asian Federation of Exchanges". <http://www.safe-asia.com/> Accessed 10 April 2010
- Sarkar R. and I. Ray (2007). "Political Scenario in Bhutan during 1774-1906: An Impact Analysis on Trade and Commerce", *Journal of Bhutan Studies*, 17, 1-21
- Schumpeter J. A. (1912). "Theorie der wirtschaftlichen Entwicklung". Leipzig: Duncker & Humblot. English translation published in 1934 as *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Schleifer A. and Vishny R. W. (1997). "A Survey of Corporate Governance". *Journal of Finance*, 52 (2), 737-783
- Sinha A. C. (2004). "Himalayan Kingdom: Bhutan, Tradition, Transition, and Transformation". Second Edition." New Delhi: Indus Publishing Company
- Williamson O. E. (1996). "The mechanisms of governance". New York, Oxford: Oxford University Press

- Williamson O. E. (2000). "The new institutional economics: Taking stock, looking ahead". *Journal of Economic Literature*, XXXVIII, 595-613
- Weinstein D. E. and Y. Yafeh (1998). "On the Costs of a Bank-Centered Financial System: Evidence from the Changing Main Bank Relations in Japan", *Journal of Finance*, 53(2), 635-672.

Stock Market Finance and Gross National Happiness

Table 1. Characteristics of South Asian stock markets, 2008

	Buddhist ratio (%)	Est.	No. Listings	Mkt. Cap. (US\$m)	Mkt. Cap. as % of GDP	Traded value (US\$m)	Turnover ratio (%)
Panel 1: South Asian Markets							
India	-- --						
Bombay		1956	4,921	647,204.80	53.16%	44,011.03	6.80%
National		1992	1,301*	568,439.00	46.69%	540,142	95.02%
SE							
Kolkata		1908	2,761	5,823.78	0.48%	-- --	-- --
Pakistan	-- --						
Karachi		1947	653	23,500.00	13.97%	350.00	1.49%
Lahore		1970	511	8,667.14	5.15%	-- --	-- --
Islamabad		1989	261	7,239.96	4.30%	-- --	-- --
Sri Lanka	69.10%	1984	235	4,285.90	10.53%	1,022.60	23.86%
Bangladesh	-- --						
Dhaka		1954	276	15,138.51	19.16%	9,687.67	63.99%
Mauritius	-- --	1988	97	2,645.90	30.58%	150.28	5.68%
Maldives	-- --	2002	4	172.99	13.73%	2.68	1.55%

Journal of Bhutan Studies

Nepal	10.70%						
Main board		1937	149	4,682.87	14.74%	291.79	6.23%
Gov. Debt		1964	-- --	77.99	0.25%	0.00	0.00%
Corp Debt		1964	-- --	22.06	0.07%	0.00	0.00%
Bhutan	75.00%	1992	17	116.30	8.50%	0.68	0.58%

Source: National stock exchange websites.

Notes:

(1) *indicates Capital Market segment.

(2) Many Indian stock exchanges were established during 1800's as colonial stockbrokers associations.

(3) Buddhist ratio indicates proportion of total population that are Buddhist (CIA World Fact Book, 2010).

Stock Market Finance and Gross National Happiness

Table 2: Descriptive Statistics - the Royal Securities Exchange of Bhutan, 2000-2008

DATA	2000	2001	2002	2003	2004	2005	2006	2007	2008
PRIMARY MARKET EQUITY									
Funds raised IPO (US\$m)	0.65	0.70	2.42	9.03	-- --	1.16	3.41	2.07	5.54
Funds raised from Rights issues (US\$m)	-- --	-- --	-- --	-- --	-- --	-- --	0.34	-- --	-- --
Funds raised from Bonus issues (US\$m)	-- --	-- --	-- --	1.80	-- --	-- --	-- --	-- --	-- --
PRIMARY MARKET DEBT									
RMA Discount Bills (US\$m)	39.21	33.68	79.83	48.16	13.14	13.18	11.16	133.38	163.53
Gov. Discount Bills (US\$m)	-- --	10.41	10.50	11.05	11.05	6.65	-- --	-- --	-- --
Parastatal (US\$m)	-- --	-- --	-- --	25.55	21.88	-- --	-- --	-- --	-- --
Gov. Bonds (US\$m)	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SECONDARY MARKET									
Shares traded (shares)	27,977	157,151	75,043	42,156	284,075	49,198	133,387	50,531	77,123
Market cap. (US\$m)	50.53	61.27	72.28	78.10	95.03	99.05	104.42	127.52	152.72
Value traded (US\$m)	0.55	1.64	0.81	0.44	2.40	0.46	0.82	0.65	0.62

Journal of Bhutan Studies

LISTINGS EQUITY									
Listed companies	15	15	15	15	15	16	16	16	19
No new listings	-- --	-- --	-- --	-- --	-- --	1	-- --	-- --	3
No. De-listings	-- --	-- --	-- --	-- --	-- --	-- --	-- --	1	-- --
RATIOS (%)									
Market cap./GDP	11.81%	13.44%	14.12%	13.42%	14.00%	12.85%	11.97%	12.15%	11.23%
Market cap./money + quasi-money	23.75%	27.48%	25.30%	25.52%	25.90%	24.06%	22.11%	21.21%	31.09%
Traded val./Market cap.	1.09%	2.67%	1.12%	0.57%	2.53%	0.46%	0.79%	0.51%	0.41%
Savings rate/GDP	30.00%	25.82%	27.61%	26.87%	27.81%	27.60%	27.48%	20.97%	20.84%
Institutional Savings (Pension)/GDP	9.84%	10.52%	10.79%	11.89%	11.85%	11.65%	11.90%	12.52%	9.15%

Source: Compiled by the authors from the Royal Securities Exchange of Bhutan website, World Bank development database and National Provident Fund Bhutan website.

Notes: (1) Parastatal issues in 2003 and 2004 are 10 year maturity bonds (7.5% coupon) for Druk Air Corporation Ltd for new aircraft; (2) RMA Discount Bills are issued by Royal Monetary Authority for 90/91 days at discount rates between 3 and 11% per annum; (3) Gov. Discount Bills are issued by Royal Government of Bhutan for 1 year at coupon rate of 7%; (4) Savings rate is amount of time, savings and foreign currency deposits in US\$m.

Stock Market Finance and Gross National Happiness

Table3. Ownership of listed equities on Royal Securities Exchange of Bhutan, 2008

	No. shareholders	Block shareholders		Public Domain shareholders				Free Float %
		Gov.	Corp. Block shareholders	Local Fin. Institutions	Domestic Inst. Investors	Foreign Inst. Investors	Individual Investors	
Bhutan Board Products Ltd.	491	47.74	-- --	13.26	10.42	-- --	28.59	52.27
Bhutan Carbide & Chemicals Ltd.	259	-- --	52.15	39.23	1.35	-- --	7.26	47.84
Bhutan Dairy & Agro Products Ltd.	96	-- --	92.73	2.66	1.06	-- --	3.54	7.26
Bhutan Ferro Alloys Ltd.	44	25.73	12.35	8.69	41.00	12.00	0.23	61.92
Bhutan National Bank Ltd.	4,357	13.61	-- --	2.10	37.61	-- --	46.68	86.39
Bhutan Polymers Company Ltd.	129	-- --	53.72	5.10	0.90	-- --	40.28	46.28
Bhutan Tourism Corporation Ltd.	162	-- --	34.43	-- --	-- --	-- --	65.57	65.57
Bhutan Times Ltd.	288	-- --	82.26	-- --	-- --	-- --	17.74	17.74
Druk Petroleum	71	-- --	98.50	-- --	-- --	-- --	1.50	1.50

Journal of Bhutan Studies

Corporation Ltd.								
Druk Plaster & Chemicals Ltd.	213	-- --	21.00	-- --	46.00	-- --	33.00	79.00
Druk Satair Corporation Ltd.	1,276	-- --	34.93	-- --	36.26	-- --	28.81	65.07
Druk Mining Ltd.	67	-- --	57.57	-- --	23.03	-- --	19.40	42.43
Druk Wang Alloys Ltd.	504	-- --	65.00	-- --	-- --	-- --	35.00	35.00
S. D. Eastern Bhutan Coal Company Ltd.	1,082	-- --	70.00	-- --	-- --	-- --	30.00	30.00
Jigme Mining Corporation Ltd.	426	-- --	70.00	-- --	-- --	-- --	30.00	30.00
Kuensel Corporation Ltd.	233	51.00	-- --	-- --	21.31	-- --	27.59	48.90
Penden Cement Authority Ltd.	1,472	42.68	-- --	1.82	30.76	-- --	24.74	57.32
Rotal Insurance Corporation of Bhutan Ltd.	1,556	39.25	-- --	0.37	5.96	-- --	54.42	60.75
State Trading Corporation of Bhutan Ltd.	125	51.00	-- --	11.96	9.90	-- --	27.14	49.00

Source: Royal Securities Exchange of Bhutan annual report 2008. **Notes:** (1) Free Float is the sum of all shareholdings in public domain.

Stock Market Finance and Gross National Happiness

Table 4. Sources of long term finance in Bhutan, US\$m

	New equity listing	New debt listing	Overall position					Position with India			
			Comm. Bank lending to business	Foreign direct Investment	Portfolio investment	Other investment		Foreign direct investment	Portfolio investment	Other investment	
						foreign aid (RGOB loans,	o/w Other loans, net			foreign aid (RGOB loans,	o/w Other loans, net
All maturities											
2000	0.65	-- --	0.00	0.00	0.00	37.32	0.00	0.00	0.00	32.72	0.00
2001	0.70	-- --	1.97	0.00	18.34	48.07	0.00	0.00	0.00	35.54	0.00
2002	2.42	-- --	2.16	2.13	0.00	59.77	0.00	0.00	0.00	39.13	0.00
2003	10.83	25.55	3.63	2.61	0.00	100.06	0.00	0.00	0.00	68.86	0.00
2004	-- --	21.88	3.66	3.47	0.00	103.12	8.03	0.00	0.00	72.02	0.00
2005	1.16	-- --	5.22	8.90	0.00	65.17	1.98	0.00	0.00	41.08	0.00
2006	3.75	-- --	5.72	6.17	0.00	78.22	7.81	0.00	0.00	52.33	0.00
2007	2.07	-- --	9.32	82.12	0.00	19.86	-0.96	0.79	0.00	-0.77	0.00
2008	5.54	-- --	8.12	24.83	0.00	-10.72	58.06	0.38	0.00	-21.75	46.05

Source: Compiled by authors from Royal Monetary Authority of Bhutan (RMA) annual report 2008. Notes: (1) New debt listing includes listing of parastatal Druk Air bonds and omits government or RMA debt. (2) New equity listing includes IPO, bonus and rights issues

Table 5. Royal Securities Exchange of Bhutan listed firms (US\$m), 2008

	Date Listed	Mkt. Cap (US\$m)	Traded Volume (shares)	Traded Value (US\$m)	Debt to Equity ratio	Estimated Cost of Equity (%)
Bhutan Board Products Ltd.	1993	2.66%	0.13%	-- --	0.17	6.50%
Bhutan Carbide & Chemicals Ltd.	1993	10.85%	1.26%	-- --	2.64	2.04%
Bhutan Dairy & Agro Products Ltd.	1994	0.19%	-- --	-- --	9.80	
Bhutan Ferro Alloys Ltd.	1995	11.19%	0.69%	-- --	4.21	41.20%
Bhutan National Bank Ltd.	1996	19.29%	62.3%	69.9%	41.07	23.35%
Bhutan Polymers Company Ltd.	1997	0.34%	-- --	-- --	0.89	28.03%
Bhutan Tourism Corporation Ltd	1994	0.86%	24.84%	19.14%	2.46	30.70%
Bhutan Times Ltd.	2008	0.54%	-- --	-- --	-- --	
Druk Petroleum Corporation Ltd.	1995	0.10%	-- --	-- --	5.45	
Druk Plaster & Chemicals Ltd.	2001	0.27%	-- --	-- --	1.30	15.18%
Druk Satair Corporation Ltd.	1998	1.86%	-- --	-- --	-- --	28.20%
Druk Mining Ltd.	1995	0.22%	-- --	-- --	5.33	
Druk Wang Alloys Ltd.	2008	2.27%	-- --	-- --	1.51	
S. D. Eastern Bhutan Coal Company Ltd.	2005	2.12%	3.87%	1.80%	0.07	50.65%

Stock Market Finance and Gross National Happiness

Jigme Mining Corporation Ltd.	2008	3.09%	0.23%	0.47%	0.38	53.78%
Kuensel Corporation Ltd.	2007	0.68%	0.28%	0.07%	-- --	10.72%
Penden Cement Authority Ltd.	1993	36.44%	1.82%	3.73%	-- --	14.01%
Royal Insurance Corporation of Bhutan Ltd.	1993	6.51%	4.54%	4.86%	10.04	20.00%
State Trading Corporation of Bhutan	1997	0.52%	0.04%	0.03%	-- --	51.12%
Total		152.72	77,123	0.62		

Source: Royal Securities Exchange of Bhutan annual report 2008

Notes: (1) Cost of equity estimated via Gordon and Shapiro (1956) dividend capitalization method. Here, CE is again the cost of equity, where:

$$CE = \left(\frac{\text{Dividends per Share (for the next year)}}{\text{Current Market Value of Stock}} \right) + (\text{Expected Dividends Growth Rate}) \quad (1)$$

and the retention ratio in equation (2) and return on equity in equation (3) are calculated using balance sheet data,

$$\text{Plowback ratio} = 1 - \text{Payout ratio} = 1 - \left(\frac{\text{Dividends per share}}{\text{Earnings per share}} \right) \quad (2) \quad \text{and} \quad \text{Return on equity} = \left(\frac{\text{Earnings per share}}{\text{Book Equity per share}} \right) \quad (3)$$

used in equation (1).

Table 6. Institutional savings in Bhutan and asset allocation (%), 2008

	2004	2005	2006	2007	2008
Panel 1: Ratios					
Funds under investment (US\$m)	80.44	89.79	103.80	131.45	124.39
Institutional savings (pension)/GDP	11.85%	11.65%	11.90%	12.52%	9.15%
NPPF non-performing loans as proportion of total loan amount	-- --	0.67%	1.48%	1.38%	1.16%
Panel 2: Asset allocation					
Bhutan					
Equities	5.00	4.00	3.79	3.38	3.00
Short term deposits	21.00	7.00	7.33	13.55	7.00
Long term deposits	-- --	7.00	14.10	12.54	11.00
Member loans	-- --	16.00	18.57	22.12	22.00
RGOB	21.00	23.00	36.28	30.22	24.00
Project loans	27.00	19.00	19.22	17.02	33.00
RMA Bills	-- --	-- --	0.72	1.17	-- --
Foreign					
United States securities	26.00	24.00	-- --	-- --	-- --
Total asset allocation	100.00	100.00	100.00	100.00	100.00

Source: National Provident and Pension Fund annual reports 2000-2009

Notes: (1) US investment is split 35% equity and 65% bonds. These were liquidated in 2005 in order to facilitate the financing of fleet of new aircraft for national airline Druk Air.

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Coinage in Bhutan During the 19th and 20th Centuries

Ratna Sarkar^a and Indrajit Ray^b

Although coins are a rich source of information due to their historic character, patterns and uses, little research has been conducted on this subject with reference to Bhutan.

Being a small landlocked and pastoral economy, Bhutan started using precious metals as money in the late 16th Century.¹ But its usage failed to spread through the length and breadth of the economy during the following two centuries due to the scarcity of this form of exchange. Barter was the rule of the market. There was no inhibition in the society against the use of money. Wherever money was available, it was used. In fact, both the barter and money-using economy went hand in hand for a long time in Bhutan. Whereas the majority of population paid their tax in kind with *kira* (women's garment), butter and grain, a small fraction of population comprising the privileged class paid their tax in coins. They also used coins for gifts and trade, specifically foreign trade. These coins were made of precious metals, especially silver. The mintage and circulation of coins, however, underwent significant improvement during the reign of King Ugyen Wangchuck (1907-26).

One of the principal objectives of this paper is to examine the degree of monetisation in the Bhutanese economy from the early period to the first quarter of the 20th Century. Section I narrates this development. Section II explains the types of

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¹ Rhodes, 'The Monetisation of Bhutan', p.80.

coins struck in Bhutan during the 18th-19th Centuries. Section III deals with the types of coins that were used during the reign of Ugyen Wangchuck. This Section also seeks to estimate the addition of money in circulation during this period. Major findings of the study are summarised by way of conclusions in section IV.

Section I: Degree of monetization during 17-18th Centuries

Because of the absence of any mint in Bhutan, coins entered the country from neighbouring countries. It was through trading that Bhutan acquired coins from Nepal, Tibet, Cooch Behar and Assam. As Nepal had its own mint, its coins were dominant in almost all Himalayan kingdoms like Tibet, Sikkim and Bhutan. Even Tibet struck her coins from Nepal and continued to do so for about 200 years from 1570. It was only in the 1790s that China established a mint at Lhasa in Tibet where production continued till 1836. As Tibet and China were the trading partners of Bhutan, the latter undoubtedly obtained coins from those countries.

During the 18th Century the coins of Cooch Behar were also available in Bhutan. These so-called *Narayani* Rupees circulated throughout north Bengal, including Rangpur, and also in the surrounding nations like Nepal, Bhutan, and Sikkim.² Also current were the octagonal-shaped silver coins of Assam that entered Bhutan through the Bhutanese trade route to Hazo, and remained in circulation until at least 1825. Along with the coins of Cooch Behar and Assam, French *Arkot* rupees, struck in Pondicherry, also entered Bhutan from the French trading station located at Goalpara in Assam.

² http://coochbehar.nic.in/HTMfiles/Narayani_currency.html.

Another channel of coin inflow in Bhutan was the regular subsidy that the British Indian Government gave to Bhutan. It was a type of bounty that was paid as compensation for the annexation of the *duars*. Initially the amount was Rs. 50,000 per annum, and was subsequently increased to Rs 100,000 in 1910.

Money also arrived in Bhutan from the *duar* region. Firstly, the governors and secretaries in Bhutan received money from the *Soubha* (Bhutanese officers under the *Penlops*, who were in charge of the *duars* and the mountain passes leading to Bhutan) of the Bengal *duars*. From the *Soubha* of Buxa *duar*, for example, the governor of Thimphu (Tassisudon) annually received Rs. 800.³ Secondly, money was used as a bribe that *duar* cattle owners gave to the Bhutanese *Sepoys* (guards) at the Bhutan-Bengal frontier. Indeed, a large number of cattle-owners lived in this area, which was confirmed by the large quantity of milk products, especially butter that was regularly exported. As the amount of tax per milch cow was fairly high, the cattle-owners evaded tax by bribing the *Sepoys* at the border. Thirdly, by allowing *duar* inhabitants to cut trees and bamboo from the forest, the Bhutanese administrators earned extra money. In the Balla and Buxa *duar* region, Bhutanese officials imposed taxes on the cultivators to be paid in money.⁴

While foreign currency was earned through exporting merchandise and otherwise, imports gave way to their leakage. For importing food stuffs from Cooch Behar, Bhutan paid in money - mostly in *Narayani* Rupees. In 1837 yearly demands from Buxa *duar*, Ghurkolla *duar* and Bijni *duar* were to the tune of 9,010, 3,950 and 2,604 *Narayani* Rupees respectively.⁵ The commodity exchange was also in vogue but

³ Bose, Account of Bootan (1815) in Kuloy (ed.), Political Missions to Bootan, p.345.

⁴ Gupta, British Relations with Bhutan, p.205.

⁵ Pemberton, Report on Bootan, pp.100-101.

too a much lesser extent. In view of these leakages, however, we should take up the balance of trade to account for the accumulation of currency that the foreign trade generated. To this end, we note it was only with Assam that Bhutan's balance of trade on the private account was about Rs.27,687 per annum in the late 19th Century⁶. Private traders apart, the Dharma Raja and the Deb Raja of Bhutan were the main traders. They used to invest annually a sum of Rs.25-30,000 and Rs.40,000 respectively during the first quarter of 19th Century⁷.

Once money started to come into Bhutan it began circulating among the different segments of the economy, although mainly between the Government and the people of Bhutan. Intra-people transactions of money were few and far between. Similar to the initial monetisation process in other countries, the payment of tax in cash was the principal channel of money circulation from the public to the Government. Until the later half of the 20th Century the majority of the Bhutanese paid their tax in kind, although the payment of tax in money had also been prevalent in Bhutan for a long time. The enthronement record of the Dharma Raja showed that in 1747, 26 percent of tax-paying households in western Bhutan paid their taxes in coin.⁸ Cattle-owners also paid tax in cash at 6 *Narayani* rupees per milch cow.⁹ Indeed, the government encouraged this mode of tax payment by discriminating the payments of gifts among tax-payers in cash and kind. Evidence shows that for the payment of tax in coins every

⁶ Ray and Sarkar, 'Reconstructing of Nineteenth Century Trade Route between Bhutan and Assam: Evidences from British Political Missions', *Journal of Bhutan Studies*, vol.13, Winter, p.10.

⁷ Bose, Account of Bootan (1815) in Kuloy (ed.), Political Missions to Bootan, p.343.

⁸ Ardussi, 'Population and Governance in mid-18th century Bhutan', p.48.

⁹ Eden, Report on the State of Bootan and on the Progress of the Mission of 1863-64, p.112.

agricultural household, locally called *lonthrel*, received a gift of one silver coin, while another category of agricultural households, called *mathrel*, and other serf families received only a half silver coin.¹⁰

Governors who collected tax paid the same in cash as tributes to the Deb Raja. It is evident that the Deb Raja used to receive Rs.3,500, Rs.1,000, Rs.4,000 and Rs.3,000 from the governors of Paro, Wandipoor, Tongsa, and Tagna respectively as yearly tribute.¹¹ The Deb Raja also received the proceeds of fines for criminal offences. In Bhutan, the 'punishment for the most heinous offences may be condoned on payment of a fine'¹². It was Rs.126 per murder. The Dharma Raja also received cash from various sources including the appointment of the Officers of State at the rate of Rs. 2,000, and also from religious ceremonies.

We have established that tax-payers who paid in cash received a gift from the government. In fact, the payment of gifts in cash by the government on various occasions had long been a regular practice in Bhutan. Gift giving was often described as 'the cement that holds society together'¹³ and as 'a means of drawing hierarchical lines between wealthy and poor, powerful and weak, and honorable and dishonorable'.¹⁴ Indeed, it was the repeated gift-giving that led to the circulation and redistribution of valuables within a community.

¹⁰ Ardussi, 'Population and Governance in mid-18th century Bhutan', p.43.

¹¹ Bose, Account of Bootan (1815) in Kuloy (ed.), Political Missions to Bootan, p.346.

¹² Pemberton, Report on Bootan, p.56.

¹³ http://www.accessmylibrary.com/coms2/summary_0286-9340604_ITM

¹⁴ *ibid.*

Available records show that in 1680, the fourth Deb Raja distributed 2,000 silver coins among the citizens, and in 1707, the eighth Deb Raja distributed one silver coin each to all citizens, including the monks. Similarly, the thirteenth Deb Raja distributed silver coins eight times during his reign (1744-63) among the citizens, each time a silver coin per recipient,¹⁵ and the 19th Deb gave a silver coin four times during his reign 1823-31. Such gift-giving popularised the hierarchical rule, and it continued even after the establishment of monarchism in the early 20th Century. Not only did Ugyen Wangchuck, the first Maharaja of Bhutan, distribute silver coins as ceremonial gifts, he also introduced the payment of gifts by a newly-appointed attendant in his regime at the rate of three copper coins to the king directly,¹⁶ and the custom of paying gifts in silver coin by a high ranking traveler to his host, in appreciation for the hospitality received.

Apart from the circulation of coins between the government and the public, money was used in transaction with foreign traders, which were frequent in the market places at Paragong, Tassisudon, and Punakha where foreign traders were dominant. In addition to silver coins, copper coins were gradually introduced in these markets but were largely confined to the transactions among the local people. .

It is clear that the economy of Bhutan became monetised to some extent during the 18th and 19th Century. According to one estimate, the total population in Bhutan was 261,340 in 1747, 312,500 in 1796 and 468,750 possibly in 1831, while tax paying households are estimated at 27,223, 40,000 and

¹⁵ Rhodes, 'Coinage in Bhutan', *Journal of Bhutan Studies*, vol. 1, no. 1, Autumn, p. 86.

¹⁶ Rhodes, 'Monetisation of Bhutan', *Journal of Bhutan Studies*, vol. 2, no. 2, Winter, p.86.

60,000 in those respective years.¹⁷ Since, on average, each household paid one *Narayani* rupee (equivalent to one-third of an Indian Rupee), tax payment in cash comes to Rs.9,074, Rs.13,333 and Rs.20,000 in those respective years. The use of money in the payment of tax thus grew at the rate of 0.96 percent per annum during 1747- 96 and 1.43 during 1796-1831. Therefore, although the monetisation in tax seems slow during 1747-96, it significantly picked up later on. On the whole, however, Bhutan experienced 1.43 per cent rate of monetisation in tax revenue during 1747-1831, which undoubtedly belonged to a slow trajectory.

Section II: Bhutanese coins during the eighteenth-nineteenth century

Bhutanese people were somewhat prejudiced against the establishment of a mint. This feeling was so strong that in spite of its necessity, Bhutan did not set up a mint for a long time, but struck coins from the mint of Cooch Behar.

Turner mentioned "...[L]ocal prejudices against the establishment of a mint, have given the narainee [*Narayani*] in these regions [Bhutan], as well as in those where [Cooch Behar] it is struck, a common currency, though both countries were perfectly independent of each other, and totally different in their language and manner".¹⁸

The fine silver content of the Cooch Behar coin and its easy accessibility to it might be another reason for Bhutan's apathy towards establishing their own mint institution. The coins of Cooch Behar which consistently weighed about 4.7 g

¹⁷ Ardussi, 'Population and Governance in mid-18th Century Bhutan', p.54.

¹⁸ Turner, An Account of an Embassy to the Court of the Teshoo Lama in Tibet, pp.143-144.

contained 80 percent fine silver.¹⁹ Assaying of these coins at the Calcutta mint showed their purity at 79.2-86.7 percent. Though this guaranteed the age-old acceptance of the *Narayani* in Bhutan, it suddenly came to an end when the British consolidated their power in North Bengal and forcibly closed the mint of Cooch Behar for the sake of uniformity in coins in and around the British Empire.

After the closure of Cooch Behar mint, however, Bhutan went for her own coin under the nomenclature of Deb Rupee. Pemberton wrote in 1838: "The coin...is almost entirely confined to a silver one called 'Deba,' nominally of the value of the Company's half-Rupee".²⁰ Several mints were established around that period, initially at Paro, Tongsa and Tagna of Bhutan: and then at Punakha and Thimphu.

In contemporary Bhutan, the mintage right was reserved for the Dharma Raja, the Deb Raja and the *Penlops*. There is evidence that in the beginning those domestic coins had good metal content. Except for a few large coins that weighed about 11.5g, the early Deb Rupee had a consistent weight of 4.5g with 80 percent purity.²¹ Two silver coins of 1790-1820 were recently found in Bhutan weighing 4.7g and 4.8g respectively, similar to the *Narayani* Rupee.²² The data-base of American Numismatic Society incorporates nine surviving silver coins of Bhutan for 1820-1835. Out of them, five weighted in the range of 4.6-4.7 grams, two within 4.4-4.5 gram, and the rest below. Between the upper and the lower values of these weights, the difference is worked out at less than 10.5 per cent. It may, therefore, be concluded that a

¹⁹ Rhodes, Coinage in Bhutan, *Journal of Bhutan Studies*, vol. 1, no. 1, Autumn, p.90.

²⁰ Pemberton, Report on Bootan, p.64.

²¹ Rhodes, Coinage in Bhutan, *Journal of Bhutan Studies*, p.92.

²² American Numismatic Society's Data Base,
<http://data.numismatics.org/cgi-bin/objsearch>

uniform and standard mintage practice was followed in different mints of Bhutan during the late 18th Century.

But there was a sharp deterioration in this practice thereafter. Evidence reveals that the deterioration started by 1830. In that year, 1,044 Deb Rupees were assayed at Calcutta Mint, and their results indicated purity at only 56.25-58.33 per cent.²³ Thus, from 80 per cent in the early phase of coinage, the purity deteriorated to 50 per cent later on. To account for this deterioration we note that in the absence of any state control on minting in Bhutan, the purity of coins depended solely on the integrity of the *Soubha*. They maintained such integrity initially for the sake of introducing new coins in the society. But once those were accepted at large, higher profitability dominated their decisions. While noting the bad purity of Bhutanese coins, Rhodes commented, “[A]s the degree of purity of the metal is entirely dependent on the personal honesty of the Soobah, so great a variety is found in the standard value of the coin...”.²⁴

Debasement of Bhutanese coins in the 19 Century was also probably triggered by growing scarcity of minting metal in the kingdom. In view of no silver mine in Bhutan, she acquired it by way of trade with other countries, especially Tibet. But since her trade was severely affected in the context of her political instability during the 19th Century, silver became scarce, and gave rise to malpractices in mintage.

A parallel development out of this shortage was the introduction of silver-coated copper coins in Bhutan around that period, which were soon replaced by pure copper coins.²⁵ Those coins were minted by the *Penlops*, other local rulers,

²³ Rhodes, *Coinage in Bhutan*, *Journal of Bhutan Studies*, vol. 1, no. 1, Autumn, p.94.

²⁴ Pemberton, *Report on Bootan*, p.65.

²⁵ Rhodes, *The Monetisation of Bhutan*, *Journal of Bhutan Studies*, vol. 2, no. 2, Winter, p.85.

and also privately by owners of copper mines in the country. Though unacceptable in foreign trade, those coins largely served domestic transactions mainly at retail levels. Many such coins for the period 1820-1910 have been collected at the American Numismatic Society. Table 1 summarizes the details of contemporary coins available there.

Table 1: Weight range of copper coins in Bhutan minted during 1820-1910

Year of Coinage	Weight range (in gram)	Variation	Mean Weight (in gram)	Rate of Debasement
1820-1835	5.23-3.15	66.03 %	4.190	-
1840-1864	4.32-3.61	19.67 %	3.965	- 5.36%
1865-1900	4.50-1.89	138.09 %	3.195	- 19.41%
1900-1909	3.81-1.19	220.17 %	2.500	- 21.75%
1910	3.14-1.17	168.84 %	2.155	- 13.80%

Source: American Numismatic Society's Data Base

A wide variation in the weight of Bhutanese copper coins can be seen in the table. Both intra-period and inter-period variations are present in these data. The intra-period coins variations are, however, seen to have been increasing over the period. As against 19.67 percent variation for the coins of 1840-65, it was about 138 percent for these of 1865-1910, 220 per cent for these of 1900-10, and 168 per cent for 1910. Inter-period variations in their values indicate that there was steady debasement of such coins. At the mean level of weight there was a debasement of 5.36 percent during 1840-64, 19.41 per cent during 1865-1900 and 21.75 per cent during 1900-10. Thus, both in respect of silver and copper metals, Bhutanese coins sharply deteriorated in purity during the 19th and the early 20th Century.

Although deterioration in purity signified a falling standard of Bhutanese coins, it served a great economic interest in that money did not flow out of the economy. It was quite normal in the previous centuries of metallic standard that money slipped out of the countries where standard currencies were struck. This was the experience in Cooch Behar, which witnessed an exodus of the *Narayani* Rupee to the Himalayan Kingdoms and therefore suffered from its scarcity. But Bhutan's currency, once struck, remained in domestic circulation for long.

Section III: Coins during 1907-26

Coinage in Bhutan improved significantly during the reign of Ugyen Wangchuck (1907-26) who took several measures to this end. He visited Calcutta Mint in 1906 to enrich his vision for currency reform in his own country. In the first place, he entrusted Calcutta Mint with the job of supplying the dies of Bhutanese coins in 1909 according to the design to be supplied by Bhutan.²⁶ This measure undoubtedly standardised coinage at a higher degree of fineness. Secondly, for the sake of adequate control over minting, the right to mintage was given only to two authorities - the Paro *Penlop* Tsering Penjor and Gongzim Ugyen Dorji. Ugyen Wangchuck also struck coins at his own mint located at Yudrong Choling. Using fine silver or by melting *Betam* (Tibetan coins) at his own mint, he struck what was called Norbu Phubchen.²⁷ A few silver coins were also minted in a flan of Tibetan coin that the Chinese struck in Lhasa in 1910, weighing about eight grams. Thirdly, Tsering Penjor was also given the responsibility for the innovation in coin design. Under his

²⁶ Rhodes, *Coinage in Bhutan*, *Journal of Bhutan Studies*, vol. 1, no. 1, Autumn, p.109.

²⁷ Rhodes, 'The Monetisation of Bhutan', p.86.

guidance, artistic coins of quality were designed with Bhutan's own emblem on it.²⁸

Most of the workers in Bhutan's mints were Cooch Beharis, whose predecessors had been captured as slaves in 1860 by Jigme Namgyal, the father of Ugyen Wangchuck. These people mostly settled at Tongsa and married local girls. Some also settled near the copper mines located in different parts of Bhutan to work in mines or in copper mints that were run privately.²⁹ Apart from silver coins, brass and copper currencies were also minted in Bhutan. A number of such currencies minted during 1900-1928 have been collected at the American Numismatic Society. Table 2 classifies them on the basis of their weights.

Table 2: Weight-wise number of copper coins during 1900-28.

Weight ranges (gram)	1.0-2.0	2.0-3.0	3.0-4.0	4.0-5.0	5.0-6.0	6.0-7.0	Total
Number of coins	25 (28.41)	21 (23.86)	28 (31.82)	10 (11.36)	3 (3.41)	1 (1.14)	88 (100)

Source: American Numismatic Society's Data Base

This table shows that copper coins dominated the low-end currency market with about 85 per cent of such coins weighing below four grams. Only about 15 per cent were weighted at 4-7 grams. The predominance of lower denomination in copper coins possibly followed from the fact that such coins were transacted in petty retail trade rather than in wholesale or foreign trade during the Wangchuck's regime.

Apart from minting on her own, Bhutan continued to receive the traditional flow of coins from both India and China. The

²⁸ *ibid*, p.100.

²⁹ *ibid*, p.99.

Chinese silver coins that entered eastern Bhutan were called *Gormo* as they were round shaped. Also entering in large quantities were coins called *Betam*, which were struck at Lhasa. These were, however, largely debased silver coins forming 'the main coin in circulation until well into the reign of the second king.'³⁰ They were about 50 percent fine and two such coins were equivalent to one fine silver Bhutanese coin. Our analysis thus shows that accretion to the money supply in Bhutan took place from two sources: i) mintage of bullion which the country imported, and ii) import of specie that occurred due to surplus balance of trade. To estimate the additional money supply from the former source, we report in Table 3 the import and export of treasure in Bhutan during 1900-25. The starting year of the period under study coincides with the era of domestic peace in this kingdom.

There had thus been regular inflow and outflow of treasure from 1906-07 onwards. For the pre-war period (1907-14) the average import of treasure was Rs.11,390 while its export stood at Rs.2,796 on the average. These series moved, however, differently during World War I. The former depressed by about 70 per cent on the average during the war period. Though it revived by around 102 per cent in the post-war period, it could not reach the pre-war level even in 1924-25. For the export series, however, we encounter a steep rate of growth: 806 per cent during the war period and then deceleration by about 84 per cent after the war. These opposite directions of the movements of the series are not difficult to explain. Huge requirements of resources in British India during World War I not only reduced the import of treasure in Bhutan but also increased its inflow from that country. It may be added in this context that the king Ugyen Wangchuck contributed Rs.100,000 to British India on that occasion.

³⁰ *ibid*, p.106.

Table 3: Net import of treasure during 1900-25 (in Rs)

Year	Bhutan's Treasure import from British India	Bhutan's Treasure export to British India	Net import value of treasure
1900-01	-	2,025	- 2,025
1901-02	-	45	- 45
1902-03	105	-	105
1903-04	180	-	180
1904-05	-	-	-
1905-06	-	7,265	- 7,265
1906-07	1,336	1,363	- 27
1907-08	5,457	3,180	2,277
1908-09	10,040	1,855	8,185
1909-10	3,021	900	2,121
1910-11	1,859	7,300	- 5,441
1911-12	51,896	4,650	47,246
1912-13	2,700	1,570	1,130
1913-14	4,758	9,123	- 4,365
1914-15	4,112	88,561	-84,449
1915-16	4,035	7,138	- 3,103
1916-17	4,448	6,990	- 2,542
1917-18	-	19,035	- 19,035
1918-19	4,615	5,040	- 425
1919-20	3,689	1,035	2,654
1920-21	3,234	5,355	- 2,121
1921-22	7,196	800	6,396
1922-23	11,439	16,480	- 5,041
1923-24	7,103	-	7,103
1924-25	9,108	-	9,108
Total	140,331	189,710	

*Source*³¹; *N.B.* ‘-’ indicates nil

³¹dsal.uchicago.edu/statistics/1894_excel/1894.165.XLS,
dsal.uchicago.edu/statistics/1894_excel/1894.166.XLS and various

Coinage in Bhutan During the 19th and 20th Centuries

Province-wise Bhutan's transaction of treasure with British India, presented in Table 4, shows that while Bhutan regularly imported and exported treasure from Bengal throughout Ugyen Wangchuck's reign, it was irregular with Assam and Eastern Bengal. In so far as the later transaction was concerned (vide Columns 3 and 5 of Table 4), Bhutan only imported it from those places during 1907-12 while during 1913-23 she was solely an exporter. In aggregate, however, Bengal's transaction with Bhutan accounted from 67-70 per cent of Bhutan's export and import of treasure.

Table 4: Bhutan's treasure import from and export to Bengal and Assam & Eastern Bengal (in RS)

Year (1)	Bhutan's treasure import from Bengal (2)	Bhutan's treasure import from Assam and Eastern Bengal (3)	Bhutan's treasure export to Bengal (4)	Bhutan's treasure export to Assam and Eastern Bengal (5)	Bhutan's net treasure import from Bengal (6)	Bhutan's net treasure import from Assam and Eastern Bengal (7)
1907-08	1,964	3,493	3,180	-	-1,216	3,493
1908-09	1,490	8,550	1,855	-	- 365	8,550
1909-10	490	2,531	900	-	-410	2,531
1910-11	1,600	259	7,300	-	- 5,700	259
1911-12	20,865	31,031	4,650	-	16,215	31,031
1912-13	2,700	-	1,570	-	1,130	-
1913-14	4,758	-	4,600	4,523	158	- 4,523
1914-15	4,112	-	87,050	1,511	- 82,938	- 1,511

issues of Accounts Relating to the Trade by land of British India with Foreign Countries for twelve months, April 1907 to March 1925.

1915-16	4,035	-	1,000	6,138	3,035	- 6,138
1916-17	4,448	-	2,000	4,990	2,448	- 4,990
1917-18	-	-	8,635	10,400	- 3,635	-10,400
1918-19	4,615	-	2,100	2,940	2,515	- 2,940
1919-20	3,689	-	300	735	3,389	- 735
1920-21	3,234	-	500	4,855	2,734	- 4,855
1921-22	7,196	-	-	800	7,196	- 800
1922-23	11,439	-	100	16,380	11,339	-16,380
1923-24	7,103	-	-	-	7,103	-
1924-25	9,108	-	-	-	9,108	-
Total	92,846	45,864	125,740	53,272		

Source: Various issues of Accounts Relating to the Trade by land of British India with Foreign Countries for twelve months, April 1907 to March 1925. N.B. ‘-‘ indicates nil

The net positive import of treasure is considered here to mean for mintage. But the negative net import of treasure did not curtail the supply of money. It used to be adjusted perhaps with the surplus balance of trade. The year 1911-12 is, however, omitted from all calculations as it represented an unusual year when very high exodus of treasure took place.

From the imported treasure a part was always used for the purpose of making jewellery and pan-boxes in Bhutan. Due to non-availability of relevant data we consider that 33 per cent of the same were used for this purpose.³² Table 5 estimates the coinage in Bhutan from the imported treasure. We have considered the average weight of Bhutanese silver coin (*Ma Tam*) is 4.5 gram,³³ and one metric ton of silver is equivalent to Indian rupees 90324.80.

³² Evidence of Stewart Pixley, Q. No. 175-179.

³³ Calculated from American Numismatic Society's Data Base.

Coinage in Bhutan During the 19th and 20th Centuries

Table 5: Estimation of coinage in Bhutan out of imported treasure

Year (1)	Net import value of treasure in Rupees (2)	Value of silver used in jewellery making (in Rupees) (3)	Value of silver used in minting (in Rupees) (4)	Net weight of silver coins (in gram) (5)	Number of Bhutanese silver coins (in <i>Ma Tam</i>) (6)
1902-03	105	35	70	775	172
1903-04	180	60	120	1,329	295
1907-08	2,277	759	1,518	16,806	3,735
1908-09	8,185	2,728	5,457	60,415	13,426
1909-10	2,121	707	1,414	15,655	3,479
1912-13	1,130	377	7,53	8,337	1,853
1919-20	2,654	885	1,769	19,585	4,352
1921-22	6,396	2,132	4,264	47,207	10,490
1923-24	7,103	2,367	4,736	52,433	11,651
1924-25	9,108	3,036	6,072	67,224	14,939
Total	39,259	13,086	26,173	289,766	64,392

Source: Computed from Table 3.

The accretion of specie from the balance of payment has been estimated as follows. We first estimated the surplus trade balance of Bhutan during 1900-25 (vide Column 4 and 8 of Table 6). From this series we deducted the negative net import of treasure on the basis of the presumption that it was financed out of trade surplus. Column 4 of Table 7 shows the increase in money supply of Bhutan due to favourable balance of payment. Adding it up with fresh coinage from imported bullion, we get year-wise the total increase in Bhutan's money supply.

Journal of Bhutan Studies

Table 6: Balance of Trade during 1900-25 (in Rs)

Year (1)	Export (2)	Import (3)	Balance of Trade (4)	Year (5)	Export (6)	Import (7)	Balance of Trade (8)
1900-01	22,229	14,316	7,913	1913-14	2,067,978	1,765,576	302,402
1901-02	38,334	18,937	19,397	1914-15	2,170,102	1,756,240	413,862
1902-03	31,785	12,742	19,043	1915-16	1,602,230	1,114,199	488,031
1903-04	58,863	13,391	45,472	1916-17	1,328,103	1,044,415	283,688
1904-05	650,018	102,570	547,448	1917-18	1,938,250	859,301	1,078,949
1905-06	1,241,172	191,748	1,049,424	1918-19	907,299	674,186	233,113
1906-07	1,135,505	256,820	878,685	1919-20	523,465	336,207	187,258
1907-08	341,452	254,171	87,281	1920-21	1,172,784	760,717	412,067
1908-09	300,377	266,058	34,319	1921-22	853,560	419,764	433,796
1909-10	194,101	155,442	38,659	1922-23	1,409,835	860,530	549,305
1910-11	193,735	93,679	100,056	1923-24	966,346	408,955	557,391
1911-12	690,911	4,227,103	- 3,536,192	1924-25	755,371	209,080	546,291
1912-13	1,518,694	1,119,499	399,195				

Source: Various issues of Accounts Relating to the Trade by land of British India with Foreign Countries for twelve months, April 1900 to March 1925.

Table 7 shows that the money supply did not increase smoothly in Bhutan during 1900-25. Increasing by *Ma Tam* 13,155,598 per annum during 1900-07, it slumped to *Ma Tam* 2,299,026 per annum during 1907-11. A steady-state growth followed during 1912-18 when it was as high as *Ma Tam* 17,116,107 per annum. In the following period of 1918-25, the rate of accretion stood at *Ma Tam* 14,980,037 per annum. On the whole, our estimate indicates that Bhutan's money supply increased by *Ma Tam* 13,427,921.22 every year, i.e. by Indian Rs. 483,405,163.82 per year.

Coinage in Bhutan During the 19th and 20th Centuries

Table 7: Estimation of additional coins in Bhutan during 1900-25

Year (1)	Surplus Balance of trade (in Indian Rs.) (2)	Proceeds of balance of trade required to finance net export of treasure (in Indian Rs.) (3)	Net amount of coins from trade balance (in Indian Rs.) (4)	Equivalent <i>Ma Tam</i> of Indian rupee* (in <i>Ma Tam</i>) (5)	Fresh coinage (in <i>Ma Tam</i>) (6)	Total addition of coins (in <i>Ma Tam</i>) (7)
1900-01	7,913	2,025	5,888	211,968	-	211,968
1901-02	19,397	45	19,352	696,672	-	696,672
1902-03	19,043	-	19,043	685,548	172	685,720
1903-04	45,472	-	45,472	1,636,992	295	1,637,287
1904-05	547,448	-	547,448	19,708,128	-	19,708,128
1905-06	1,049,424	7,265	1,042,159	37,517,724	-	37,517,724
1906-07	878,685	27	878,658	31,631,688	-	31,631,688
1907-08	87,281	-	87,281	3,142,116	3,735	3,145,851
1908-09	34,319	-	34,319	1,235,484	13,426	1,248,910
1909-10	38,659	-	38,659	1,391,724	3,479	1,395,203
1910-11	100,056	5,441	94,615	3,406,140	-	3,406,140
1912-13	399,195	-	399,195	14,371,020	1,853	14,372,873
1913-14	302,402	4,365	298,037	10,729,332	-	10,729,332

Journal of Bhutan Studies

1914-15	413,862	84,449	329,413	11,858,868	-	11,858,868
1915-16	488,031	3,103	484,928	17,457,408	-	17,457,408
1916-17	283,688	2,542	281,146	10,121,256	-	10,121,256
1917-18	1,078,949	19,035	1,059,914	38,156,904	-	38,156,904
1918-19	233,113	425	232,688	8,376,768	-	8,376,768
1919-20	187,258	-	187,258	6,741,288	4,352	6,745,640
1920-21	412,067	2,121	409,946	14,758,056	-	14,758,056
1921-22	433,796	-	433,796	15,616,656	10,490	15,627,146
1922-23	549,305	5,041	544,264	19,593,504	-	19,593,504
1923-24	557,391	-	557,391	20,066,076	11,651	20,077,727
1924-25	546,291	-	546,291	19,666,476	14,939	19,681,415
Total	8,713,045	135,854	8,577,191	308,777,796	64,392	308,842,188

Source: dsal.uchicago.edu/statistics/1894_excel/1894.165.XLS,
dsal.uchicago.edu/statistics/1894_excel/1894.166.XLS and various issues of *Accounts Relating to the Trade by land of British India with Foreign Countries for twelve months, April 1900 to March 1925*.

N.B. ‘-‘ indicates nil, * 1 Rupee = 36 Ma Tam.

Section IV: Conclusion

During the 17th-18th Centuries, Tibetan, Assamese and *Narayani* coins of Cooch Behar were in circulation in Bhutan. These coins flowed in from various sources, mainly the country's trading activities with her neighbours and subsidies given by the British Government. Within the country the circulation of currency took place between the government and the public. While the public gave it to the government in the form of tax, the government provided the public with currency on many auspicious occasions. Coins were not, however, exchanged in petty retail transactions; their uses were confined to the large business centres of the country where foreign traders participated. However, we have estimated that Bhutan's tax payment was monetised at the rate of 1.13 per cent per annum during 1747-1831.

From the first half of the 19th Century Bhutan started striking her own silver coin, the Deb Rupee. Initially this currency had a consistent weight with 80 per cent purity, but due to the shortage of silver and the dishonesty of minting authorities, the purity deteriorated. The silver shortage also gave rise to the use of copper coins in the country. This study reveals that copper coins also deteriorated during the 19th and the early 20th Century.

A standard form of the Bhutanese coin emerged only after the enthronement of Bhutan's first monarch Ugyen Wangchuck. He regularised this system by various measures such as the confinement of minting privileges to limited authorities, standardisation of coins, and the use of dies manufactured at Calcutta mint.

Bhutan's currencies came from two sources, foreign sources (since foreign coins, especially Indians, were accepted in all transactions) and domestic mints, which minted the imported treasure and the proceeds of trade balance. This study has estimated that during 1900-25 total accretion of the

Bhutanese coin was of the order of *Ma Tam* 308,842,188. Out of these, *Ma Tam* 64,392 were minted in the country, and *Ma Tam* 308,777,796 came from British India.

Bibliography

- Accounts Relating to the Trade by Land of British India with Foreign Countries for twelve months, Commercial Intelligence Department, India, April 1907 to March 1925.
- American Numismatic Society's Data Base,
<http://data.numismatics.org/cgi-bin/objsearch>
- Ardussi, John & Karma Ura, 'Population and Governance in mid-18th century Bhutan as revealed in the Enthronement record of Thugs-Sprul' Jigs med grags pa I (1725-1761)', *Journal of Bhutan Studies*, Vol. 2, No. 2, winter, Thimphu, 2000.
- Bose Kishen Kant, Account of Bootan (1815), in Kuloy H.K. (ed.), Political Missions to Bootan, Bibliotheca Himalayica, Manjusri Publishing House, New Delhi, 1972 (First Published 1865).
- Deb Arabinda, Bhutan and India: A Study in Frontier Political Relations (1772-1865), Firma Klm, Calcutta, 1976.
- Eden, Ashley, Report on the State of Bootan and on the Progress of the Mission of 1863-64 in Kuloy H.K. (ed.), Political Missions to Bootan, Bibliotheca Himalayica, Manjusri Publishing House, New Delhi, 1972 (First Published 1865).
- Gupta S., British Relations with Bhutan, Panchsheel Prakashan, Jaipur, 1974.
- Kuloy H.K. (ed.), Political Missions to Bootan, Eden, Report on the State of Bootan and on the Progress of the Mission of 1863-64 Bibliotheca Himalayica, Manjusri Publishing House, New Delhi, 1972 (First Published 1865).
- Pemberton R.B., Report on Bootan, G.H.Huttmann, Bengal Military Orphan Press, Calcutta, 1838.
- Pixley Stewart, Q.Nos 175-179, First Report of the Royal commission appointed to inquire into the recent changes

- in the relative values of the precious metal, PP., H.C., V.22, paper no.5099, 1887.
- Rhodes Nicholas, 'Coinage in Bhutan', *Journal of Bhutan Studies*, Vol. 1, No. 1, Autumn, Thimphu, 1999.
- Rhodes Nicholas, 'The Monetisation of Bhutan', *Journal of Bhutan Studies*, Vol. 2, No. 2, Winter, Thimphu, 2000.
- Turner Samuel, *An Account of an Embassy to the Court of the Teshoo Lama in Tibet*, Bibliotheca Himalayica, Series I, volume, 4, Manjusri Publishing House, New Delhi, 1971 (First Published 1800).

Citation

Rinchen Pelzang (2010) Attitude of Nurses towards Mental Illness in Bhutan, *Journal of Bhutan Studies*, 22 (Summer 2010), pp.60-76.

Attitude of Nurses towards Mental Illness in Bhutan

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Abstract

This paper explores the general nurses' attitudes towards mental illness in Bhutan. A non-probability convenience sample with quantitative descriptive method was used. The sample represents the known population of nurses from National Referral Hospital (JDWNR Hospital), Thimphu. Responses were analyzed using descriptive statistics including means; standard deviations, and frequency. Cronbach's alpha and Spearman's correlation were used to analyze the internal consistency reliability of each factors and the correlational variation caused by each variables. Overall, the findings indicated that the nurses surveyed have a positive attitude towards mental illness (mean - 134.39, SD - 17.35). Findings from this study shows that the nurses with psychiatric experience of 3-4 weeks and 4 weeks respectively were found to have more positive attitude towards mental illness indicating that the clinical placement of nurses in psychiatric unit improves attitudes towards mental illness.

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Introduction

A persistent negative attitude and social rejection of people with mental illness has prevailed throughout history in every social and religious culture (Luty et al. 2007). Of all the health problems, mental illnesses are poorly understood by the general public. Such poor knowledge and negative attitude towards mental illness threatens the effectiveness of patient care and rehabilitation.

Background

Generally, people with mental illness were viewed as either immoral souls punished by 'God', or caused by 'Black Magic', or as being possessed by 'evil spirits' requiring exorcisms and other religious interventions. The people with psychosis and drug dependence belong to the group of mental illness that receive the most negative attitudes from the public. Most people think they are dangerous, unpredictable and hard to care for (Luty et al. 2007). This poor and inappropriate view about mental illness and negative attitude towards the mentally ill can inhibit the decision to seek help and provide proper holistic care.

The majority of patients and their families who are seeking help for their mental illness rightfully expect the hospital and nursing staff to be cognisant of their needs and treat them as unique individuals without any prejudice and discrimination (Fisher, 2007 and Shatell et al. 2007). The attitudes and knowledge of the health professionals on mental illness has been argued to be a major determinant of the quality and outcome of care for mentally ill (Callaghan et al. 1997 and Jadhav et al. 2007). While we know that the attitudes of service personnel with whom they interact determines the quality and outcome of care for mentally ill, there has been no study conducted in Bhutan to assess the nurses' attitude towards mental illness.

Exploring trends in nurses' attitudes towards mental illness would have implications for nursing practices worldwide. This study was carried out to explore the general nurses' opinion about mental illness for a number of reasons. First, nurses are responsible for ensuring that clients with severe mental illness receive the services they need in a timely manner (Hromco et al. 1995). Second, nurses need to be able to provide mental health education and care with a positive attitude in the community, as community care is the most accessible form of care worldwide (World Health Organization, 2007). Third, In view of the severe scarcity of mental health personnel, the role of general nurses becomes more critical in caring for the mentally ill. Fourth, a positive attitude towards mental illness is a necessary prerequisite for the provision of holistic care to the patients (World Health Organization, 2007).

Method

The study was conducted in the National Referral Hospital (NRH) using the quantitative descriptive survey design in 2008. A non-probability convenience sample was used in this study as it would not be possible to collect the data from all nurses in the country, nor would all agree to participate in the study. Initially, the sample for the study targeted 50-100 different levels of nurses (Master, Bachelors Degree, General Nurse Midwife, Auxiliary Nurse Midwife and Assistant Nurse) working in NRH.

The Opinion about Mental Illness (OMI) scale by Ng & Chan (Ng and Chan, 2000) which was modified in Bhutanese context in the English version was used to collect data. The survey questionnaire is made up of two sections: Demography and OMI. The demographic section consists of six items measuring the subjects' age, gender, marital status, nursing experience, qualification and psychiatric experience. A demographic profile sought the background of the participants in the study. The OMI section has 50 items and

measures the general attitude to mental illness. Respondents were given the choice of five response categories to tick based on their feelings from totally disagree to totally agree (totally disagree = 1, almost totally disagree = 2, sometimes agree = 3, almost totally agree = 4, totally agree = 5) accordingly. Items belonging to one concept or factor were grouped together and given a conceptual heading during the questionnaire development. The OMI generates a possible range of scores from 50, indicating the most positive attitude to mental illness, to 250, which indicates the most negative attitude to mental illness. It consists of six conceptual factors: *benevolence*, *separatism*, *stereotyping*, *restrictiveness*, *pessimistic prediction*, and *stigmatisation*.

Benevolence was described as “a paternalistic, sympathetic view, based on humanistic and religious principles” (Hinkelman and Granello, 2003; p.263). This attitude arises from a moral point of view, a humanitarian, religious kindness towards the patients (Aker et al. 2007). This factor was intended to measure the paternalistic and sympathetic views of the nurses. *Separatism* is described as treating people with mental illness away from their community and in institutions (Corrigan et al. 2003). This factor was intended to measure the nurses’ attitude of discrimination. *Stereotyping* was described as selective perceptions that place people to obscure differences within groups (Byrne, 2000). It is the collectively held beliefs about the members of social groups which lead to the strong impressions and expectations of individuals (Corrigan et al. 2003). This factor was intended to measure the degree of nurses’ maintenance of social distance towards the mentally ill. *Restrictiveness* reflects the restriction of the mentally ill persons’ freedom of social contact and activities during treatment and hospitalisation, as well as upon discharge, in order to protect their families and society at large from them (Aker et al. 2007). This factor was intended to measure ‘viewing the mentally ill as a threat to society’ (Hinkelman and Granello, 2003). *Pessimistic prediction* is the negative evaluative component towards the mentally ill. This

factor was intended to measure the level of prejudice towards mental illness. *Stigmatisation* is the feeling of disgrace or discredit, which sets a person apart from others (Byrne, 2000). This factor was intended to measure the discriminatory behaviour of the nurses towards mental illness.

Data

Following (ethical) approval from the Research Unit, Health Ministry and Administrative approval from the Hospital Director all participants received, in person, the questionnaire. Data was collected from all categories of nurses in NRH, Thimphu. A brief explanation of the study, anonymity and confidentiality of the participant, date, time and place of collection were provided to the nurses. Participation in the study was voluntary and the return of completed questionnaire was treated as the participants' consent.

Data was managed and analysed using the Statistical Package for Social Sciences (SPSS) version 16.0. Descriptive statistics were used to describe the nurses' attitude towards mental illness. The demographic items that consist of categorical data showing differences between each level were presented as a percentage. The OMI scale consists of 5-point Likert Scales. A value of 1 represents the opinion to the item *totally disagree*. Five represented the opinion of *totally agree*. The mean of each item was calculated. Those items with a score of 1 or 3 were considered to have an acceptable level of positive attitude towards mental illness for the factors *Separatism, Stereotyping, Restrictiveness, Pessimistic prediction and Stigmatisation*. Those items with higher score (3 or 5) for the factor *Benevolence* was considered to have an acceptable level of positive attitude towards mental illness as it is a reverse score of (positively worded) items. The internal consistency reliability of each of the factors was assessed by calculating Cronbach's alpha scores. A value of > 0.5 was

considered to represent a sufficient standard of reliability in this study. The demographic variables were compared with each OMI factor by computing the mean average and standard deviation. The variation caused by each demographic variable on each of the negative opinion items was explored by using Spearman's correlation.

Results

All categories of nurses directly involved in patient care in the hospitals participated in this survey (Table 1). Of the 86 survey questionnaires distributed in all the wards of NRH, 62 completed questionnaires were received yielding a response rate of 72%. Among the surveyed samples 47 were female (75.8%). The age of the participants was mostly within the range of 20-30 years (46.8 %). Only 9.7% of the sample is single. About 32.3% of the sample had a nursing experience of 6-10 years. Majority (50.0%) of the participants has qualification of Diploma in Nursing. Of the 62 nurses, 39 (62.9%) had no psychiatric experience at all.

Attitude/Opinion towards mental illness

The 50 items scale measuring opinion of nurses towards mental illness was satisfactorily completed by each of 62 respondents. The overall mean ascribed for the 50 items scale was 134.39 (standard deviation 17.35), considered to indicate overall a positive attitude to mental illness. The Cronbach's alpha score for the 50 items was 0.81, indicating that the 50 items displayed an excellent level of overall internal consistency reliability (Table 2). The mean score for each item of the six factors of the OMI scale of the total sample were assessed successfully indicating overall a high level of positive attitude (Table 2). However, nine items from different factors displayed an attitude towards mental illness above the Likert rating of 3 or *sometime agree* (Table 3).

Table 1: Demographic characteristic of subjects (n=62)

Characteristics	N	%
Age (years)		
20 – 30	29	46.8
31 – 40	25	40.3
41 – 50	8	12.9
Gender		
Female	47	75.8
Male	24.2	15
Marital Status		
Married	56	90.3
Single	6	9.7
Nursing experience (years)		
1 – 5	16	25.8
6 – 10	20	32.3
11 – 15	14	22.6
16 – 20	6	9.7
> 20	6	9.7
Qualifications (nursing)		
Certificate (Assistant Nurse)	13	21.0
Certificate (Auxiliary Nurse Midwife)	8	12.9
Diploma in Nursing	31	50.0
Bachelor of Nursing	10	16.1
Psychiatric experience		
No experience	39	62.9
1 – 2 weeks	13	21.0
3 – 4 weeks	5	8.1
> 4 weeks	5	8.1

Table 2: Internal Reliability Coefficients, Means, and Standard Deviations for Six Factors of the OMI Scale assessed by Cronbach alpha (n=62)

Factor	Number of items	Overall mean	Overall Standard deviation	Reliability score (Cronbach's alpha)
All Factors	50	134.39	17.35	0.81
Separatism	15	34.00	7.07	0.71
Stereotyping	06	17.48	3.53	0.46
Restrictiveness	07	14.77	4.52	0.67
Benevolence	11	43.82	7.22	0.75
Pessimistic prediction	06	15.50	4.20	0.62
Stigmatisation	05	8.81	2.70	0.52

Acceptable levels of reliability are: Cronbach alpha > 0.5

The results of the comparative analysis reveals (Table 4) as follow: Nurse with the Age group of 20 – 30 and > 4 weeks of psychiatric experience has less restrictive attitude than others. Age group of 41-50, female, and nursing experience group of >20 years are more pessimistic and has more stigmatise attitude. Males, singles, bachelor's degree and the nurses with > 4 weeks of psychiatric experience are more benevolent. Female and nurses with >4 weeks of psychiatric experience has more attitudes of separatism. The nurses with certificate (ANM), nursing experience of > 20 years and 11- 15 years has more stereotype attitude. Only four demographic variables were significantly correlated with four negative attitude items during correlational analysis. The demographic variable, which correlates significantly with each of the negative attitude items, is shown below (Table 5).

Table 3: items of OMI with negative attitude (n= 62)

Factor	Items	Range	Mean	Standard deviation
Separatism	People with mental illness have unpredictable behaviour	1-5	3.82	1.21
Separatism	If people become mentally ill once, they will easily become ill again	1-5	3.02	1.06
Separatism	Psychiatric hospitals should not be located in residential areas	1-5	3.18	1.40
Separatism	People with mental illness tend to be violent	1-5	3.47	0.82
Stereotyping	It is easy to identify those who have a mental illness	1-5	3.06	1.07
Stereotyping	You can easily tell who has a mental illness by the characteristics of their behaviour	1-5	3.39	0.99
Stereotyping	All people with mental illness have some strange behaviour	1-5	3.35	0.96
Restrictiveness	Every mentally ill person should be in an institution where he/she will be under supervision and control	1-5	3.24	1.34
Pessimistic prediction	People are prejudiced towards those with mental illness	1-5	3.24	1.04

Religious Practice of the Patients and Families

Table 4: Comparison of demographic variables with six factors (Mean and standard deviation)

Demography		Factors					
		<i>Benevolence</i>	<i>Separatism</i>	<i>Stereotyping</i>	<i>Restrictiveness</i>	<i>Pessimistic prediction</i>	<i>Stigmatisation</i>
		Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)
Age (years)	20-30	4.07 (13.05)	2.16 (14.61)	2.91 (6.83)	2.01 (7.27)	2.48 (6.47)	1.62 (3.47)
	31-40	3.93 (13.52)	2.38 (15.29)	2.89 (6.47)	2.17 (7.78)	2.74 (6.99)	1.80 (4.47)
	41-50	3.84 (12.98)	2.29 (16.13)	2.98 (7.03)	2.27 (8.77)	2.48 (7.62)	2.15 (5.00)
Gender	Female	3.95 (13.04)	2.31 (16.06)	2.93 (6.87)	2.17 (8.01)	2.69 (7.13)	1.81 (4.57)
	Male	4.10 (13.55)	2.12 (13.58)	2.88 (6.33)	1.92 (5.36)	2.26 (5.58)	1.61 (3.93)
Marital status	Married	3.96 (13.64)	2.27 (15.99)	2.92 (6.86)	2.13 (7.89)	2.60 (6.93)	1.76 (4.43)
	Single	4.23 (8.17)	2.22 (10.47)	2.83 (5.19)	1.95 (5.41)	2.45 (6.39)	1.80 (3.94)
Nursing experience (years)	1-5	4.20 (13.04)	2.09 (12.82)	2.81 (6.45)	1.97 (6.97)	2.53 (6.61)	1.50 (3.55)
	6-10	4.08 (11.91)	2.22 (15.01)	2.93 (7.09)	2.01 (7.33)	2.64 (6.41)	1.67 (3.77)
	11-15	3.95 (12.71)	2.52 (14.77)	3.05 (5.60)	2.09 (6.30)	2.39 (6.30)	1.91 (3.85)
	16-20	3.67 (14.84)	2.20 (17.35)	2.70 (7.07)	2.19 (8.96)	2.75 (8.00)	1.83 (5.54)
	> 20	3.47 (13.76)	2.37 (17.49)	3.06 (8.24)	2.76 (10.02)	2.81 (8.38)	2.33 (5.73)
Qualification	AN (C)	3.62 (15.13)	2.31 (18.01)	2.78 (7.24)	2.27 (8.10)	2.77 (7.37)	1.86 (5.36)
	ANM (C)	3.78 (13.52)	2.43 (15.18)	3.15 (7.02)	2.43 (8.89)	2.92 (7.88)	2.00 (5.20)
	Dip.	4.02 (13.14)	2.26 (14.31)	2.89 (6.36)	2.06 (7.00)	2.46 (6.22)	1.70 (3.74)
	BSc.	4.51 (7.12)	2.11 (14.01)	2.97 (6.59)	1.81 (6.01)	2.45 (6.99)	1.64 (4.06)

Psychiatric Experience (Weeks)	No. exp	3.88 (13.71)	2.31 (15.61)	3.00 (6.52)	2.07 (7.59)	2.59 (6.61)	1.78 (4.45)
	1-2	4.08 (12.49)	2.16 (16.21)	2.74 (7.31)	2.31 (8.19)	2.85 (7.11)	2.02 (4.78)
	3-4	3.93 (13.28)	2.09 (12.42)	2.78 (6.62)	2.34 (7.43)	2.17 (3.98)	1.32 (2.05)
	>4wks	4.62 (7.38)	2.39 (13.99)	2.90 (6.65)	1.69 (5.29)	2.27 (6.92)	1.36 (2.20)

Note: Higher the mean score for Benevolence – more positive attitude. Lower the mean score for other five factors (separatism, stereotyping, restrictiveness, pessimistic prediction and stigmatisation) – more positive attitude towards mentally ill. AN (C) – Assistant nurse (certificate); ANM – Auxiliary Nurse Midwife (certificate); Dip. – Diploma; BSc – Bachelor of Nursing.

Table 5: Correlation between each demographic variable with each negative item.

(r=rho)

OMI negative items	Demographic variable	Statistic	Statistical significance
People with mental illness have unpredictable behaviour	Age	0.11 ^r	0.40
Psychiatric hospitals should not be located in residential areas	Marital status	0.19 ^r	0.14
All people with mental illness have some strange behaviour	Nursing experience	0.13 ^r	0.33
Every mentally ill person should be in an institution where he/she will be under supervision and control	Psychiatric experience	0.19 ^r	0.14

Discussion

Generally, the 50 items in the Likert scale questionnaire displayed a high level of internal reliability (Cronbach's alpha score 0.81). This indicates that Bhutanese nurses have a positive attitude towards mental illness. There is a significant difference between the nurses' psychiatric experiences and their attitude towards mental illness. The nurses who had > 4 weeks of psychiatric experience had a significantly higher means (positive attitude) for benevolence, and were the least restrictive and least stigmatised. This finding suggests that the theoretical training and clinical placement in a psychiatric unit creates positive attitudes of nurses towards mental illness, and increased interpersonal contact with people with mental illness is associated with improved attitudes towards mental illness as a whole (Mehta et al. 2007; Murray and Steffen, 1993).

However, the findings are contradictory with the reports that practical nurses with less psychiatric experience had a more positive attitude (Weller and Grunes, 1988). The finding indicates that the nurses' feeling of responsibility for mental illness, and the education on mental health and psychiatric experiences improves the attitudes of the individual. There are essentially three possible means to have a positive attitude and more tolerance towards mental illness for the nurses in this sample: familiarity (Corrigan et al. 2003); their choice of nursing as an occupation; and the nurses' religious beliefs and their personal values (Callaghan et al. 1997).

Nine of 50 items from six factors (Table 3) scored higher than 3 indicating a negative attitude towards mental illness. Previous contact some of our nurses had with mental illness, may have been negative. Therefore, the nature of the contact that our sample had with those who were mentally ill may have been affected by the inequality of the relationship. Consecutively, the nurses belonging to the experience group of >20 years are less benevolent, more restrictive and more

stigmatised towards mental illness than others. This may be due to inadequate education especially with regard to working with people with serious mental illness (Murray and Steffen, 1993). The negative attitudes associated with the above nine items may be partly due to a failure to observe and learn about mental health; thus, education and clinical experience in mental health may decrease the negative attitude towards mentally ill (Lam et al. 1993). The relatively low level of support for the above nine items has implications for the planning of nursing education on mental illness.

Implications of the study for nursing practice, education and research

Opinion and attitude towards mental illness are influential in determining behaviour (Baron, 1992). While the findings of this study cannot be generalised, it suggests that the care of people with mental illness in Bhutan may be affected in a number of ways. The care might have been influenced by the nurses' attitude and knowledge towards mental illness. In theory their welfare may be protected by the overall positive opinion expressed by this sample. In practice, because of the negativity of some of the specific attitudes shown in this study by the sample, people with mental illness may be treated with disrespect (Callaghan et al. 1997). Nevertheless it is important for nurse educators or managers to investigate the areas of emphasis to address (Evangelou et al. 2005).

Since there has been no mental health research carried out among Bhutanese people, this research has taken a small step in the direction of improving health care situations in Bhutan. However, further comprehensive research on all different health professionals and the public especially the nature of contact with mental patients is necessary. Because of the many ramifications of cultural conceptions, it is very important for health practitioners to investigate and monitor public attitudes and beliefs about mental illness (Link et al. 1999).

The findings of this study reveal that Bhutanese nurses have a positive attitude towards mental illness. Nevertheless, it should be considered within the context of its limitations. Only the limited nurses (n = 62) were used as a sample which may not represent all nurses and therefore limit the generalisability of the findings. Data collection by questionnaire is not without problems. We cannot be sure that the participants who received the questionnaire were the same ones who completed it. The instrument was self-reported and it was not difficult to determine the socially desirable responses for most of the questions. Also, the construct reliability of the questionnaire was not assessed for future use.

The finding of this study highlights a number of areas for nurse educators and managers to address. An immediate strategy based on the evidence obtained from this study would be to initiate the Continuation Medical Education (CME) for the health care professionals and nursing students with a focus on mental health. The trend in modern health care is towards the performance of comprehensive nursing care. Mental health education would enable the nurses and other health professionals to understand and gain self confidence to provide comprehensive care to the mentally ill (Park, 1973). The content of such educational programs would commonly include the provision of information about the nature and causation of mental illness (Gureje et al. 2006). Providing nurses with a better understanding of serious mental illness and training in a broader range of interventions could help them create a more positive attitude towards their patients (Byrne, 2000; Ewers et al. 2002). There is some evidence to support that education and clinical placement in psychiatric units increases the health professionals' willingness to assume some responsibility for assisting people with mental illnesses, to express higher levels of kindness and benevolence, and to be less willing to view people with mental illness as a threat to a society (Hinkelman and Granello, 2003).

In conclusion, this study marks the first reported investigation on nurses' attitudes towards mental illness in Bhutan. The findings in this study reveal that the Bhutanese nurses surveyed have positive attitudes towards mental illness. Nurses with psychiatric experience of 3-4 weeks and > 4 weeks respectively were found to have more positive attitude towards mental illness. Nevertheless, it is important to carry out further comprehensive research on the areas of emphasis to address, specifically, the health care professionals and nursing students' attitude and knowledge on mental health. Further, the evidence obtained from this study would be to promote the existing CME on mental health.

References

- Aker, S. et al (2007). The attitude of medical students to psychiatric patients and their disorders and the influence of psychiatric study placements in bringing about changes in attitude. *The Israel Journal of Psychiatry and Related Sciences* 44, pp.204-212
- Baron, R.A. (1992). *Psychology (2nd Edition)*. Allyn & Bacon, Boston.
- Byrne, P. (2000). Stigma of mental illness and ways of diminishing it. *Advances in Psychiatric Treatment* 6, pp.65-72
- Callaghan, P. et al (1997). Attitudes towards mental illness: testing the contact hypothesis among Chinese student nurses in Hong Kong. *Journal of Advanced Nursing* 126, pp. 33-40
- Corrigan, P. et al (2003). An attribution Model of Public Discrimination towards Persons with Mental Illness. *Journal of Health and Social Behavior* 44, pp.162-179
- Evangelou, H. (2005). The influence of education of nursing students on the formation of attitudes toward psychiatric illness. *ICUS NURS WEB J*, Issue 23, pp.1-8

- Ewers, P. et al (2002). Does training in psychosocial interventions reduce burnout rates in forensic nurses? *Journal of Advanced Nursing* 37, pp.470-476
- Fisher, J.E (2007). Mental health nurses: De facto police. *International Journal of Mental Health Nursing* 16, pp.230-235
- Gureje, O. et al (2006). Do beliefs about causation influence attitudes to mental illness? *World Psychiatric* 5, pp.1-6
- Hinkelman, L and Granello, D.H. (2003). Biological sex, adherence to traditional gender roles, and attitudes toward persons with mental illness: An exploratory investigation. *Journal of Mental Health Counseling* 25, pp.259-270
- Hromco, J.G. et al (1995). Mental health case management: Characteristics, job function, and occupational stress. *Community Mental Health Journal* 31, pp.111-125
- Jadhav, S. et al (2007). Stigmatization of severe mental illness in India: Against the simple industrialization hypothesis. *Indian Journal of Psychiatry* 49, pp.189-194
- Lam, A. et al (1993). A pilot study: Students' attitude and interests in mental health nursing. *Australian Journal of Mental Health Nursing* 2, pp.281-286
- Link, B.G. et al (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health* 89, pp.1328-1333
- Luty, J. et al (2007). Effectiveness of changing minds campaign factsheets in reducing stigmatised attitudes towards mental illness. *Psychiatric Bulletin* 31, pp. 377-381
- Mehta, S. et al (2007). Roles of general adult psychiatrists in follow-up clinics. *Psychiatric Bulletin* 31, pp.381-384
- Murray, M.G and Steffen, J. J. (1993). Attitudes of case managers toward people with serious mental illness. *Community Mental Health Journal* 35, pp.505-514
- Ng, P and Chan, K.F. (2000). Sex differences in opinion towards mental illness of secondary school students in Hong Kong. *International Journal of Social Psychiatry* 46, pp.79-88

- Park, Y.S. (1973). A study of the attitudes of nonpsychiatric registered nurses towards mental illness and mental patients. *Journal of Korean Academic Nursing* 3, pp.31-44
- Shatell, M.M. et al (2007). 'Take my hand, help me out': Mental health service recipients experience of the therapeutic relationship. *International Journal of Mental Health Nursing* 16, pp.274-284
- Weller, L and Grunes, S. (1988). Does contact with the mentally ill affect nurses' attitude to mental illness? *British Journal of Medical Psychology* 61, pp.277-284
- World Health Organization (2000). *Atlas nurses in mental health*. WHO: Switzerland.

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Religious Practice of the Patients and Families during Illness and Hospitalization in Bhutan

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Abstract

The purpose of the study is to explore the demand and extent of religious rituals performed by patients and families during illness and hospitalization in Bhutan. The study has used a convenience sample with quantitative method. The survey questionnaire was administered to a total of 106 patients and families who were admitted to the hospital at least for three days. Simple frequency count and percentages were used to interpret the findings of the study.

The study reveals significant religious rituals performed during the illness and hospitalizations. 105 (99.1%) of the sample performed religious rituals/prayers when someone in the family is sick. Of 105, 43 (41.3%) performed ritual/prayers to gods, evil spirits, local deities, and simply as ritual. Of 88 respondents, 31 (35.2%) who performed the rituals/prayers before they came to hospital did for the cure or recovery from the disease. The extent of religious practice during illness and hospitalization were assessed. In addition, information about the benefits of religious rituals/prayers and the religious facilities needed in the hospitals were explored. The results of the study suggest that religious care is considered important for Bhutanese people and integration of the religious care in the health care system would enhance the quality of health care services.

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Introduction

When caring for sick and dying, religious practice has a long tradition in the Bhutanese society. When faced with serious illness, individuals often display more outward signs of devotion to their religion than they did in everyday life. People frequently attend to religious concerns within religious communities through the use of traditional religious practices, beliefs, and values that reflect the cumulative traditions of their religious faith. Further, many believe in its capacity to aid in the recovery from disease. A large body of research in the west and Asia has found that most people pray or perform rituals during their illness and hospitalization in order to cope with serious adversity. It has also suggested that the religious practice is associated with a wide range of health related outcomes, including mortality and several dimensions of psychological well-being (Chattopadhyay, 2007).

Background

Religion

Religion is believed to be universal; however it is considered differently by different people (Rao, 2001). The word 'religion' is known to be derived from the Latin word 'religare', which means to bind or tie together. Religion is defined as 'a set of beliefs, practices, language and behaviour based upon belief in a deity or god of a community (Astrow et al, 2001). Religion is considered as faith, beliefs, something to help with the problems of life where in most cases a religion involves gods/goddesses or spirits (Bassette, 2000). Religion thus focuses on defined structures, rituals and doctrines of a group of people (Chattopadhyay, 2007; Rao, 2001). Religious practice or care therefore refers to the degree of involvement to the beliefs and practices of an organized religion (Muller et al, 2001). Religious practice or care includes listening, rituals,

prayers, exorcisms, and other special rituals commemorating death.

Religious care and its relationship with health care

When facing a crisis and strikes with illnesses, people often turn to their religion for consolation and peace of mind. Many believe in its capacity to help in solving the problem and the recovery of diseases (McNichol, 1996). It is believed that the art of healing is a prerogative of the gods and plays a significant role when a cure is not possible and the person questions the meaning of life. Religious care as a part of health care in general, aims at integrated care that includes the patient's environment and the circumstances of his/her life. Thus, religious care contributes in providing holistic care to the patient.

As caring for the sick and dying, religious care has a big role in the modern health care system. Religious beliefs and practices were known to be associated with a positive outcome in health care. People find their religion helps them maintain health and to cope with illnesses, losses, and life transitions by integrating body, mind and soul (spirit) (Meador, 2004; Kalkhoran & Karimollahi, 2007). Recent evidence indicates that both patients and families consider religious care to be important in end-of-life care, which includes the spectrum from some sense of an emotionally sensitive care of the 'human spirit to a highly ritualized religious care incorporating very specific rites for the dying and a multitude of possibilities in between (Meador, 2004; Lee & Newberg, 2005). Further, religious care is said to enhance pain management, improve surgical outcomes, protect against depression, and reduce risk of substance abuse and suicide (Larson & Larson, 2003).

In the recent survey study by Tzeng & Yin (2006) to learn about the current hospital allocation and management of religious services and facilities in Taiwanese hospitals

revealed that the religious rites and ceremonies are known to provide comfort, meaning, hope and solace to patients and their family. Further, the different studies by Siegel & Schrimshaw (2002) and Feudtner, Haney, & Dimmers, (2003) to find out the specific benefits individuals perceive they receive from the religious belief and practices revealed that the religious practices during illness and death not only provides relaxation, it also helps to reduce or offset the potentially deleterious effects of stress on health and well being of the people. The later study also revealed that most of the participants pray to 'God' for their well-being and strength.

The qualitative study by Krause et al (2002) among the Japanese elderly to see whether the religious practices buffer the effect of death of a significant other or change in self-reported hypertension over time, revealed the protective effect of religion on patients' morbidity, mortality, symptoms of depression, and overall psychological distress in the population. It is also revealed that religious practice is especially useful for helping people to cope with illness and the death of the loved one by eliciting the relaxation response.

Further, a study by Clark et al (2003) to investigate the link between providing religious/spiritual care and patient satisfaction in the USA showed that there was a strong relationship between overall patient satisfaction and the extent to which staff addressed patients' religious needs. The study further suggested that health care services should include the availability of religious resources and hospitals should have a team dedicated to evaluate patients' experience with religious care services to improve the emotional and religious care of patients.

In a study by Narayanasamy et al (2004) to investigate health care providers' perceptions of their role in addressing older people's religious needs in the UK found that the participants identified patients' religious needs in four ways: religious

practices or belief; seeking comfort, reassurance, healing power and connectedness through religion; absolution; and seeking for the meaning and purpose of life. They also identified the strategies to meet their patients' religious needs: by supporting and having respect to patients' religious beliefs and practices including privacy, listening to patients' concerns and providing appropriate reassurance and comfort; helping patients to connect with their religious beliefs by using health professionals' own religious beliefs to assist the patients; and assisting the patients to complete unresolved religious issues.

Religious practice in Bhutan

In Bhutan, the people's way of life is greatly influenced by religion that remains a part of everyday Bhutanese life. Buddhism and Hinduism are the two main religions practiced in Bhutan.

It is evident that prior to the establishment of the modern health care the Bhutanese did consult the doctors where the doctors in this instance were of the shamans, lamas, and other traditional healers who practice wisdom of health called 'Sowa Rigpa' or 'the science of healing' (Ministry of Health, Royal Government of Bhutan, 2008). The 'Sowa Rigpa' incorporates ancient medical practices connected with magic and religion, which is based on Indian and Chinese traditions. Treatment is elaborate with many tantric 'anti ghosts' rituals and religious medicines or herbal treatment. The essence of this great art respects the principles of Buddhism and Hinduism, which encourages understanding the way of the universe, man and sickness. Buddhists and Hindu believes in life after death and they engage in performing many kinds of religious prayers, rites and ceremonies all the time.

Religious rites and prayers are considered as an essential component of patients' and their family members' coping

strategies for dealing with the physical and emotional distress resulting from illness in Bhutanese society. As it is often believed that the illnesses are caused by the demons, evil spirits, black magic, or bad action that upset gods or deity, practices began to take on ritualistic qualities in order to appease a local deity or cast away the demon or black magic. Apart from a good deal of rituals and worship taking place in the home, where people often maintain Buddhist or Hindu altars, divination and monastic ritual services have become significant component of resolving issues of morbidity through traditional practices. With these, many Bhutanese people including government officials (in a personal capacity), visits temples to worship the gods and perform rites and rituals at home. Some pray to the 'god or god of medicine', some appeal to the known deity, ghosts or evil spirit, and others practice ritual ceremonies such as conducting 'shamans' and sacrificial activities for exorcism to please the gods, ghosts, local deity and others. Rituals like taking 'Jabthru' or 'thrueso' (bathing with blessed water in order to cure diseases), changing the patient's name and temple ceremonies were performed to diminish the harmful effects of the disease. An interesting fact is that many Bhutanese offer prayers to the god because they believe that praying to god will result in more blessings and help cure the disease.

The present study explored the extent of religious practice carried out during illness and hospitalization in Bhutan. This study provides and discusses some implications for health care reform, research and education.

Method

The study was conducted in the 200 bedded National Referral Hospital, Thimphu, Bhutan in late 2009. A purposively selected convenience sample with quantitative method was used. Patients and family who were admitted to the hospital for at least three days from various wards (JDWNRH) were

used as sample in this study. The patients included covered both physical and mental illness.

Instrument

We collected the research data by a written questionnaire in English designed by the researcher specifically for this study. The questions were closed-ended (dichotomous, multiple-choice, cafeteria, and rating questions). It consists of seventeen questions which make seven variables all together:

Variable 1: Extent of religious practice during illness and to whom they pray for

This variable was indicated to investigate the extent of religious rituals/prayers the people perform when someone is sick and to whom they pray for. Six indicators such as God; ghost or evil spirit; local deity, just as ritual ceremonies; all of the above; and others were identified because of their popularity in Bhutan. However, 'others' in this item is indicated to any other indicators in case if the samples pray for any other unique elements other than above mentioned.

Variable 2: Extent of religious ceremonies carried out before hospitalization and its reasons

This variable was intended to investigate the extent of religious rituals/prayers carried out before they were admitted to hospital and for what reason. Seven indicators such as: for help and wellness; hope; solace/comfort; as a culture, belief and custom; for strength and control; cure and recovery of disease; and all of the above were identified in this item.

Variable 3: Extent of religious ceremonies carried out after hospitalization and its benefits

This variable was indicated to investigate the extent of religious rituals/prayers carried out after they were hospitalized and what benefits they get from religious ceremonies. Seven indicators such as: cope with illness; enhance the sense of hopefulness; decrease painful feelings; enhance physical well-being and decrease stress; help resolving religious conflicts and doubts; all of the above; and others were identified in this item. However, 'others' in this item is indicated to any other indicators in case the samples were experienced through prayers/rituals they performed.

Variable 4: Hospital staffs' support for religious practice and its requirement in health care system

This variable was designed to ascertain whether the hospital staffs are supportive towards the patients' religious ceremonies during their hospitalization, whether the patients want the religious ceremonies to be considered as part of the medical care, and patients want the health care staff to understand and discuss the religious matters during their hospitalization.

Variable 5: Religious facilities required in the hospitals

This variable was designed to explore what kind of religious facilities the patient and family would like to have to help meet their care. There were seven choices: room/space to pray and carry out religious ceremonies; access to 'Lama' for fulfilling patients' religious and spiritual needs; room/space for family to keep sick patients; collaboration with religious agencies/organizations to provide religious and spiritual services; social work office to provide access to religious services; referral system for religious care and services within hospital; and all of the above.

Variable 6: Possible roles and responsibilities of 'lama' in the hospital

This variable was intended to find out what should be the roles and responsibilities of a 'lama' in the hospital and how a 'lama' could help the patient during their hospitalization. There were seven choices: provide religious counselling; read Buddhist scriptures, provide religious support/guidance; facilitate religious rituals and practices; and help patient/family identify the values regarding end-of-life treatment choices; all of the above; and others. Others in this variable mean the roles and responsibilities that the patient/family feel is important to help them during their hospitalization.

Variable 7: Importance of religious care to enhance quality of health care services

This variable was intended to explore whether the patients and family feel that the religious care is required in the health care system and whether it is considered important to promote quality health care. Participants were given five options to choose: extremely important; very important; important; not important; and don't know. This variable was also intended to investigate how the religious care will help improve the quality of health care. For this, dichotomous question were used.

Procedure

Following ethics approval from Research Ethics Board of Health, Ministry of Health, Bhutan, data were collected from patients and relatives, who were admitted in JDWNRH, Thimphu for at least three days during the month of October, 2009. A brief verbal explanation of the study, anonymity and confidentiality of participants with a packet of questionnaire (in English) which contained an informed consent form (both in English and Dzongkha) were provided to the participants during data collection. The researcher personally assisted to

complete the questionnaire for those who were not able to read English. Participation was voluntary and participants were made to sign the consent form which was retained by the researcher. The data was entered and processed using Statistical Package for Social Sciences (SPSS) version 16.0 software. Simple frequency count and percentages were used to interpret the findings of the study.

Results

The total sample consisted of 106 participants who were admitted to the ward for three days prior to data collection. Of 106 participants, 105 (99.1%) admitted that they perform religious rituals/prayers when someone in the family is sick; 88 (83.0 %) of the participants has performed religious rituals before they came to hospital; 69 (65.1%) participants performed the rituals/prayers after coming to hospital. Of 105 who perform religious rituals, 43 (41.3%) performed these rituals for all (god, ghost or evil spirit, local deity, and just as ritual ceremonies). All 88 participants who did perform religious rituals before they came to hospital, performed at least once before they came to hospital. Thirty six (40.9%) performed rituals more than five times. Thirty one (35.2%) performed the rituals for 'cure or recovery of the disease [see table 1].

Among the participants who performed the rituals/prayers after coming to hospital, 64 (92.8%) performed the rituals outside hospital (either at home or religious place). Sixty two (89.9%) of those who performed rituals performed by themselves, four (5.8%) performed with the permission of the 'Nurse on Duty', two (2.9%) with the permission of 'Concerned Doctor', and only one (1.4%) with the permission of the 'Hospital Authority'. Twenty one (29.2%) said that the rituals help them to cope with illness; enhance the sense of hopefulness; decrease the painful feelings; enhance physical well-being and decrease stress; and help resolving religious conflicts and doubts (all of the above) [see table 2]. Seventy

Religious Practice During Illness and Hospitalization in Bhutan

five (75.8%) indicated that the hospital staff are supportive for religious rituals, 93 (88.6%) indicated that the religious matters should be considered as part of their medical care, while 96 (90.2%) wants health care providers to understand and discuss the religious matters during their hospitalization.

Table 1: extent of religious practice during illness and before hospitalization (n=106)

Indicators	Frequency	Percentage
<i>Extent of religious practice during illness and to whom they pray for</i>		
Not answered	02	1.90
God	40	38.5
Ghost or evil spirit	04	3.8
Local deity	15	14.4
Just as ritual ceremonies	01	1.0
All of the above	43	41.6
Others (as per the lama's advice)	01	1.0
<i>Extent of religious ceremonies carried out before hospitalisation and its reason</i>		
Not answered	18	17.0
For help and wellness	18	20.5
For hope	02	2.3
For solace/comfort to patient and family	05	5.7
As culture, belief and custom	04	4.5
For strength and control	02	2.3
For cure or recovery of disease	31	35.2
All of the above	26	29.5

Table 2: How do the rituals and prayers help with the illness? (n=106)

Indicators	Frequency	Percentage
Not answered	34	32.1
Cope with illness	03	4.2
Enhance the sense of hopefulness	09	12.5
Decrease the painful feelings	10	13.9
Enhance physical well-being and decrease stress	16	22.2
Help resolving religious conflicts and doubts	12	16.7
All of the above	21	29.2
Others (to tolerate/endure the situation)	01	1.4

Ninety eight (92.5%) participants felt that the hospitals in Bhutan should have religious care facilities. Among them 52 (53.6%) would like to have: space to pray and carry out religious ceremonies; access to a 'Lama' for fulfilling patients' religious and spiritual needs; space for family to keep deceased patients (dead body); collaboration with religious agencies/organizations to provide religious and spiritual services; social work office to provide access to religious services; and referral system for religious care and services within hospital (all of the above) [see table 3]. Of 103, 42 (40.8%) felt that the lama should provide religious counselling; read Buddhist scriptures, provide religious support/guidance; facilitate religious rituals and practices; and help patient/family identify the values regarding end-of-life treatment choices (all of the above) [see table 3].

One hundred and five (99.1%) participants have answered the question '*how important do you think the religious care is to enhance the quality of health care services?*' 54 (51.4%) felt the religious care was extremely important to enhance the quality of health care services [see table 4]. Further, 91 (86.7%) of 105 participants agrees that religious care would help improve the quality of health care by increasing patient/family satisfaction, four (3.8%) disagree with the statement, while ten (9.5%) said 'I don't know'.

Discussion

This study explored the extent of religious practice of the patient and family during their illness and hospitalization. The study revealed a significant amount of religious practice carried out during the illness and hospitalizations. Rituals/prayers were found to be carried out for gods, ghosts or evil spirits and local deities to appease them, indicating that the people believe in evil spirits causing the illness. This indicates that most of the Bhutanese people resort to help from the religious community before they come to the hospital. This may be due to their strong trust or beliefs in

religion that help them feel secure, complete and fulfilled (Begley, 1994). Perhaps, it could also be argued about the adherence with hospital treatment regimens (Siegel & Schrimshaw, 2002).

Table 3: Religious facilities the participants would like to have in the hospitals and Lama's roles and responsibilities in the hospital (n=106)

Indicators	Frequency	Percentage
<i>Religious facilities the participants would like to have in the hospitals</i>		
Not answered	09	8.5
Room/space to pray and carry out religious ceremonies	18	18.6
Access to 'Lama' for fulfilling patients' religious & spiritual needs	13	13.4
Room/space for family to keep deceased patients (dead body)	03	3.1
Collaboration with religious agencies/organizations to provide religious and spiritual services	05	5.2
Social work office to provide access to religious services	00	0.0
Referral system for religious care and services within hospital	06	6.2
All of the above	52	53.6
<i>Lama's roles and responsibilities in the hospital</i>		
Not answered	03	2.8
Provide religious counselling	18	17.5
Read Buddhist scriptures	09	8.7
Provide religious support/guidance	05	4.9
Facilitate religious rituals and practises	20	19.4
Help patient/family identify the values regarding end-of-life treatment choices	07	6.8
All of the above	42	40.8
Others	02	1.9

Table 4: Importance of religious care in enhancing quality of health care services (n=106)

Indicators	Frequency	Percentage
Not answered	01	1.9
Extremely important	54	51.4
Very important	27	25.7
Important	19	18.1
Not important	03	2.9
I don't know	10	9.5

The main reason to perform the religious rituals or prayers during illness is found to be for the cure or recovery of the illness. This might be because the Buddhist and Hindu tradition recognizes religious care as a key part of healing. Many believe in its capacity to aid in the recovery from illness. (McNichol, 1996). Further, the study indicates that the religious rituals/prayers help the patient and family: to cope with illness; enhance the sense of hopefulness; decrease the painful feelings; enhance physical well-being and decrease stress; and help resolve religious conflicts and doubts. The findings lend yet more support to the theory that religious beliefs and activities often play a central role in individuals' attempts to cope with stressful life events by eliciting the relaxation response (Pargament, 1997; Krause et al 2002; Bearon & Koenig, 1990).

The data obtained from this study shows that the religious ceremonies during hospitalizations has been carried out by the patient and family themselves at home. Only few had carried out with the permission of doctor, hospital authority and nurses on duty. This might be because the religious practice in the hospital is restricted or because of lack of religious facilities in the hospital. Nevertheless, the study revealed that the hospital staffs were generally supportive in religious practices during the hospitalizations. The findings also suggest that the religious issues and matters be considered as part of the medical care and the medical staff to understand and discuss the religious matters during

medical care. This indicates that the health care providers should be competent enough to provide appropriate religious care to the patient. It is noteworthy, that apart from supportive staff in religious care, religious matters or issues were considered important for patient care.

The study suggests that the hospitals in Bhutan should have religious resources such as: room for praying and religious ceremony; access to a 'Lama'; room for deceased; collaboration with religious organizations; social work office; and referral system for religious care within the hospitals in order to fulfil patients' religious and spiritual needs.

According to the study the 'Lama', if available in the hospital, should take the extra responsibilities such as: religious counselling; reading Buddhist texts; providing religious support/guidance; facilitating religious rituals; and helping patient/family identify the values regarding end-of-life treatment choices. The study also revealed that the religious care would help improve the quality of health care by increasing the patient/family satisfaction thus considering the religious care to be extremely important to achieve the quality of health care services in the health care system. Thus, the finding of this study suggests the importance of incorporating religious or spiritual care in the health care system to increase the quality of health care services.

Limitations of the present study

The present study has a number of limitations. First, the sample was not representative of all the Bhutanese population. Moreover the demographic characteristics of the respondents have not been explored. Second, the use of self reported mixed questions (dichotomous, multiple-choice, cafeteria, and rating questions), did not allow for detailed interpretation of the findings. This raises obvious questions regarding self-report bias. Third, only seven variables were used in the present study to assess which may not cover all

religious care measures, as a religious care is a vast concept that contains a large number of domains and a wide range of a specific attitudes and behaviours. Fourth, the construct reliability and content validity of the questionnaire is not assessed in this study.

Implications for health care service reform, research and education

Despite education and access to free health care services in the country, religious practice during illness and hospitalization remains high. The findings of the relatively high incidence of religious practice during illness and hospitalization have major implications for reform in the health care services. Religion is clearly considered important to many patients and families. Further, it demonstrates that people in Bhutanese society are considered not merely physical bodies that require only mechanical care. For health care organizations, it is important to accept this unique characteristic of religious behaviour as respecting the religious needs of patients is the key to delivering high quality and holistic health care. Further, it indicates that promoting quality health care in Bhutan will need to address religious care which respects the patients' values and beliefs in the health care system. Religious care may encourage or forbid certain behaviours that impact health care.

Religious care plays a significant role when cure is not possible and people question the meaning of life (Meador, 2004). It helps patients feel complete, secure and fulfilled (Begley, 1994). Moreover, offering, religious care to patients and families during patients' hospitalization, as non-intrusive health care services, would create more patient satisfaction and better medical outcomes (Johnson, 2005). Therefore, health organizations are obligated to respond to religious needs as patients have the right to such services to safeguard their personal dignity, respect their cultural, psycho-social, and religious values. Taking care of patients' religious

concerns would promote ethical care and encourage a more holistic approach to health care.

However, it is not easy to build a patient-centred health care delivery system that promotes holistic care that covers the whole care continuum and involves family members and the entire health care team. Nevertheless, health organizations should try to provide patient care with collaboration from different indigenous support systems such as religious organizations. Collaboration with these resources could potentially alleviate some of the myths and misconceptions that are attached to the modern medical treatment seeking process. Further, religious care is important in health care organizations when allocation of limited resources leads to moral, ethical and spiritual concerns (Rumbold, 2007). The religious care would also contribute to a healthy organizational culture whereby religious resources would serve as integral members of health care teams as they move across disciplinary boundaries taking care for staff members themselves who experience the stress of patient care.

Implications for future research includes data collection from more representative samples, by means of longitudinal studies incorporating the use of multidimensional measures, in order to facilitate explanation of the relationship between health care and utilization of religious care. It is also suggested to incorporate the demographic characteristics of the participants to investigate if any response differences exist across different groups of the people.

Future research is also needed to address whether the benefits of religious/spiritual coping are associated with greater psychological adjustment overtime. Further, research is needed to see whether the religious practice is really related to the improvement of individual health, for example, to see whether religion affiliation or presence in the health care system really have an effect on individual health. It is also needed to compare the perspectives of health care providers,

patients, families and administrators on religious care for the purpose of developing religious sensitivity of health care providers in health care system.

Finally, in order to incorporate religious care in the health care system one needs to be competent in providing religious care without affecting the modern medical treatments and care. It is also critical for health care providers to learn how to respect patients, and family members' religious needs, such as traditional practices through the life cycle and death. We need to educate both the health and religious people in order to more ably work as a team in the provision of holistic care to patients.

Improving health care providers' knowledge and attitudes about religious care and about making referrals for religious services to religious people would enhance and enable the delivery of quality care to the patient and family. Educating health care providers in certain protocols such as a model of religious/spiritual care would be valuable in guiding health care interventions. Further, the optimally trained and wise 'Lama' who provides religious services would foster a sense of care for one another that acknowledges the interdependency of the provider, the family, and the patient in this work of living and dying.

Conclusion

This study marks the first investigation of the demand and extent of religious practice of the patient and family during their illness and hospitalization in Bhutan. Although, the findings of this study cannot be generalized, it reveals that a significant religious practice is carried out during the illness and hospitalizations for cure or recovery of the illness. It also indicates that the religious rituals/prayers help the patient and family: to cope with illness; enhance the sense of hopefulness; decrease the painful feelings; enhance physical well-being and decrease stress; and help resolve religious

conflicts and doubts. Resources like a room for praying and religious ceremony; access to a 'Lama'; room for deceased; collaboration with religious organizations; social work office; and referral system for religious care within the hospitals in order to fulfil patients' religious and spiritual needs were found to be required in the hospitals.

The study also found that the religious care is considered to be extremely important to achieve the quality of health care services by increasing the patient/family satisfactions, indicating the importance of incorporating the religious or spiritual care. Integrating religious care would potentially alleviate some of the myths and misconceptions that are attached to the modern medical treatment seeking process and facilitate patient-centred holistic care in the health care system. Nevertheless, it is important to investigate whether the religious practice is really related to the improvement of individual health. It is also necessary to compare the perspectives of health care providers, patients, families and administrators on religious care for the purpose of developing the religious sensitivity of health care providers.

References

- Astrow, A. B., Puchalski, C. M., Sulmasy, D. P. (2001). Religion, Spirituality and Health Care: Social, ethical and practical considerations. *American Journal of Medicine*. 10(4): 283-287
- Bassette, D. (2000). Religion in Ancient Rome. Rich East High School, Park Forest. <http://www.richeast.org/htwm/Greeks/Romans/Bass/index.html#TAG1> (retrieved 21 June 2010)
- Bearon, L. B., and Koenig, H. G. (1990). Religious cognitions and use of prayer in health and illness. *Gerontologist* 30(2): 249-253
- Begley, S. S. (1994). Tibetan Buddhist Medicine: A transcultural nursing experience. *Journal of Holistic Nursing*. 12(3): 323-342

- Chattopadhyay, S. (2007). Religion, spirituality, health and medicine: why should Indian physicians care? *Journal of Postgraduate Medicine*. 53(4): 262-266
- Clark, P. A., Drain, M., and Malone, M. P. (2003). Addressing patients' emotional and spiritual needs. *Joint Commission Journal of Quality and Safety*. 29(12): 659-670
- Feudtner, C., Haney, J., and Dimmers, M. A. (2003). Spiritual care needs of hospitalized children and their families: A national survey of pastoral care providers' perceptions. *Paediatrics*. 111(1): e67-e72.
- Johnson, T. D. (2005). Intensive Spiritual Care: A case study. *Critical Care Nurse*. 25(6): 20-26
- Kalkhoran, M. A. And Karimollahi, M. (2007). Religiousness and preoperative anxiety: a correlational study. *Annals of General Psychiatry*. 6(17): 1-5
- Krause, N., Liang, J., Shaw, B.A., Sugisawa, H., Kim, H., and Sugihara, Y. (2002). Religion, Death of a Loved One, and Hypertension among Older Adults in Japan. *The Journals of Gerontology, Series B, Psychological sciences and social sciences*. 57(2): S96-S107
- Larson, D. B. And Larson, S. B. (2003). Spirituality's potential relevance to physical and emotional health: A brief review of quantitative research. *Journal of Psychology and Theology*. 31(1): 37-51
- Lee, B. Y. And Newberg, A. B. (2005). Religion and Health: A review and critical analysis. *Zygon*. 40(2): 443-468
- McNichol, T. (1996). The new faith in medicine. *USA Today*, April 7
- Meador, K. G. (2004). Spiritual care at the end of life: What is it and who does it? *North Carolina Medical Journal*. 65(4): 226-228
- Ministry of Health, Royal Government of Bhutan. (2008). *Annual health Bulletin 2008*. Thimphu: KMT Press
- Muller, P. S., Plevak, D. J., Rummans, T. A. (2001). Religious involvement, spirituality and medicine: Implications for clinical practice. *Mayo Clinic Proceedings*. 76(12): 1225-12235

- Narayanasamy, A., Clissett, P., Parumal, L., Thompson, D., Annasamy, S., and Edge, R. (2004). Response to the spiritual needs of older people. *Journal of Advance Nursing*, 48(1): 6-16
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, and practice*. Guilford Press: New York
- Rao, C. N. S. (2001). *Sociology: Primary principles*. S. Chand & Company Ltd: New Delhi
- Rumbold, B. D. (2007). A review of spiritual assessment in health care practise. *Medical Journal of Australia*, 186(10): S60-S62
- Siegel, K., and Schrimshaw, E.W. (2002). The perceived benefits of religious and spiritual coping among older adults living with HIV/AIDS. *Journal of the Scientific Study of Religion*, 41(1): 91-102
- Tzeng, H., Yin, C. (2006). Demands for religious care in the Taiwanese Health System. *Nursing Ethics*, 13(2): 163-179.