

**CHANGING DIMENSION OF INTERNATIONAL SECURITY:
THE CHALLENGE OF PANDEMICS**

*Dissertation Submitted to Jawaharlal Nehru University in partial fulfillment of the
requirements for the award of the Degree of*

MASTER OF PHILOSOPHY

ABDUL RASHID RAINA



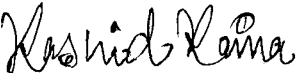
**Diplomacy and Disarmament Division
Centre for International Politics, Organisation and Disarmament
School of International Studies Jawaharlal Nehru University
New Delhi-110067
India
2010**



Date: 27.07.2010

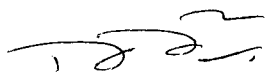
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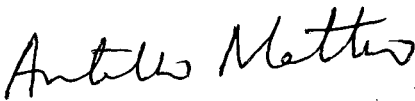
I declare that the dissertation entitled "CHANGING DIMENSION OF INTERNATIONAL SECURITY: THE CHALLENGE OF PANDEMICS", submitted by me in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of Jawaharlal Nehru University is my own work and has not been previously submitted for any degree of this or any other university.


Abdul Rashid Raina

CERTIFICATE

We recommend that this dissertation be placed before the examiners for evaluation.


Prof. Rajesh Rajagopalan
Chairperson, CIPOD/SIS


Prof. Amitabh Mattoo
Supervisor

Chairperson
Centre for International Politics,
Organization & Disarmament
School of International Studies
J.N.U., New Delhi

Dedicated

To

My Family

For Its Consistent and Invariable Support

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Acknowledgements

First and foremost I would like to thank and express my heartiest gratitude to my supervisor Prof. Amitabh Mattoo for the much needed guidance and insightful suggestions. This work would not have been possible without his illuminating inputs at regular intervals. His professional excellence contributed greatly towards shaping the research.

My special thanks to Dr. J. Madhan Mohan, for his valuable inputs and constant support. He remained a great source of inspiration and encouragement through out the research and otherwise also.

I would take this opportunity to thank faculty members of CIPOD. The most notable among them; Prof. Swaran Singh, Prof. Pushpesh Pant, Prof. Rajesh Rajagoplan Happymon Jacob, Dr. Moushmi Basu, and Dr. Manish Dhabade for sharing their valuable professional experience which was instrumental in making this research a reality.

This work finds its current shape because of the sincere and dedicated efforts by my friends at JNU, especially Khurshid Mir, Abhay Kumar, Imtiyaz Alam, Amit Ranjan, and Javiad Bhat. My special thanks to Jeetandra Kumar and Maqsood Alam whose precious guidance at each and every step proved insightful and illuminating. It is not possible to mention each and every name here; I would like to thank everyone who helped me in this endeavour.

Last but not the least; I would like to thank my respected parents and other members of my family. Their contribution was a rare source of moral inspiration. Their blessings are hard to neglect.


Abdul Rashid Raina

Chapter One

Introduction

The purpose of this study is to understand, describe and analyse the changing dimensions of national and international security. The study will trace the evolution of the concept from the traditional state centric focus to a much broader contemporary view, which includes within its ambit a range of issues and threats as diverse as economic, ecological and societal. There is a growing realisation within the discipline of international relations that this project of broadening of the concept of security is increasingly relevant in the contemporary context given the large number of threats faced by the nation states round the globe.

The study also focuses on the newly developed idea of human security that encompasses health security as a subset within its domain. The debates on health security are examined in detail to understand and analyse the different dimensions and to assess the level to which these have permeated in security studies/international relations worldwide. Security from pandemics has not been given much prominence in the field of security studies or the larger field of international relations. Indeed international relations theory has so virtually remained disconnected from the threats emanating from the spread of infectious diseases. A survey of the response mechanisms and efforts made at the international/multilateral levels is conducted to test their effectiveness in securing reduction of threats from pandemics. The principal argument of this study is that conventional threats dominate the mainstream discourse on security; consequently, the threat from pandemics has been neglected despite pandemics claiming millions of lives every year worldwide. The aim is to analyse reasons for the lack of attention of international relations scholarship in the area and the continuing lack of international preparedness to tackle the threats emanating from the pandemics. The study is particularly relevant in the present scenario with pandemics occurring with an increasing frequency and more virulent strains manifesting themselves at each stage of their recurrence. The lack of preparedness or the limited nature of preparation has meant that pandemics can become more dangerous than the conventional threats to security of the

nation states, in terms of the number of fatalities that are caused by the widespread of these infectious diseases. The recent experience during outbreak of SARS in China (2003), H5N1 or Asian avian influenza and recent H1N1 strain of swine flu in the Mexico (2009), transcending borders with absolute immunity and little resistance, are cases that reinforce the importance of the study.

The concept of security has evolved considerably over the years. Traditionally, security was defined primarily at the nation-state level and almost exclusively through the military prism. This focus on external military threat to national security was particularly dominant during the Cold War. The dominant concept of security during the Cold War was intimately linked to realist theory, which focuses on state's behavior in ensuring security by military means. This concept linked security with military issues and the state-centered use of force. Four dominant concerns of the security studies during the Cold War can be identified, these are; balance of power, bipolar stability, containment and deterrence.

The end of the cold war heightened the debate on the future of national and international security. The new research agenda became broader in its focus. Several research scholars focused their attention on the issues falling out side the domain of the state centric conceptions of the security. It was argued that it is misleading to confine security analysis to traditional military threats to the territorial integrity of states. A need was felt to broaden the agenda of the security studies. Much of the scholarship, in the years following the end of the cold war, was dominated by the conceptions of ethnic and civil wars as were witnessed in many regions of the world in the nineties. The theme of globalisation as a threat to the sovereignty and territorial integrity of the states, as an instrument of cultural imperialism, figured prominently in the discourse on security.

Other themes, as a part of the broadening agenda were to include such diverse issues as economic, social, political stability, ecological, demographic and international migration. In this sense the focus shifted to entities other than the state, moving down to the level of individual or human security. The proponents of the human security argue that the proper referent for security should be the individual rather than the state. Human security holds that a people-centered view of security is necessary for national, regional and global stability. The United Nations Development Programme's 1994 report on

Human Development is considered a milestone in the field of human security. The slogan, “freedom from fear” and “freedom from want” become a buzzword in the academic and policy circles. Seven areas of security were recognised by the report; economic security, food security, environmental security, health security, personal security, community security and political security. The September 2001 attacks on the United States added a new dimension to the domain of security studies, in form of non-state actors. Security from pandemics comes under the broad category of human security. We are increasingly confronted with new or newly emerging virus infections of humans and animals, yet not much attention has been paid to tackle the deadly viruses and infections which cause millions of deaths every year round the globe. Perhaps the most glaring examples of virus infections that have caused the deaths of many millions of people in the past century were the influenza and AIDS pandemics. In recent years, the outbreak of Swine flu and the SARS outbreak of 2003 in China have heightened concern about the threats posed by pandemics. Outbreak of Swine flu (2009) and the SARS outbreak of 2003 in China have heightened concern about the threats posed by pandemics.

A complex mix of social, technological and ecological changes, and the ability of certain viruses to adapt rapidly to a changing environment, seems to be at the basis of this phenomenon. The lack of attention by the international community and lack of information sharing among the states further complicates the problem.

Literature Review

Security is a contested concept, in opposition to a set of generally agreed definitions and meanings attached to it. Despite continued efforts by the international relations scholarship to broaden its agenda, no coherent and widely acceptable definition of the term ‘security’, could be established (Buzan, 1991: 15-16). According to Buzan (1991: 01), the concept of security is, in much of its prevailing usage, “so weakly developed as to be inadequate for the task.” Buzan suggests four explanations for what he calls “the persistent underdevelopment of thinking about security”. These include the complexity of the concept, overlap between the concept of security and concept of the balance of power, objections to realist position, interest in maintaining the ambiguity of the concept.

Close examination of the evolution of approaches to security studies can generate a more profound understanding of the concept. Historically the term was used mainly in the military sense as protecting the borders or defending the territorial integrity and national sovereignty of a state. National security was viewed as a goal to be pursued by military means. This notion of security was intimately linked to the realist approach, the tradition which maintains that interest is all what matters in the international relations, that states are guided by the pursuit of power (Kenneth Waltz, 1979). It maintains that States act as independent, sovereign political units that focus on their own survival (or expansion). For that reason, the objective of national security is survival of the nation-state rather than the guarantee of international security (Haftendorn, 1991: 08). The roots of realism can be traced back to Thucydides, Morgenthau and Machiavelli. Realism is not a single theory. It has several variants: classical realism and neorealism, and offensive realism versus defensive realism. Classical realists, of which one of the most influential was Hans Morgenthau, believe that states, like human beings, have an innate desire to dominate others, which leads them to fight wars (Morgenthau:1948). In this perspective, state power is an end in itself (Glaser, 1994: 53). Morgenthau also stressed on the relevance of the classical, multipolar balance-of-power system and saw the bipolar rivalry between the US and the Soviet Union as especially dangerous.

Neorealists of whom Kenneth Waltz is most prominent stress focus on the international system. Neorealists see the international system consisting of a number of great powers, each seeking to survive, hence a state of perpetual threats shapes behaviour of the states in the international system, and power becomes a mean to achieve the end of security (Glaser, 1994: 53). Kenneth Waltz, in *Theory of International Politics* (1979) set the tone for some of the most controversial methodological and theoretical debates in IR in the 1980s and the 1990s. Within the empiricist/positivist tradition of IR, the advent of neorealism or structural realism generated the neorealist/neoliberal debate on the meaning of anarchy, the nature of state conflicts and the possibility of cooperation in security affairs. Offensive realist John Mearsheimer (1990; 2001) asserts that the search for power and security is unending.

The focus on military threats and the use of force “complemented ideas of power and interest and the rather tough-minded approach to foreign policy which seemed

appropriate for the Cold War years” (Garnett,1996: 12). An outstanding example of a traditional definition of security, stressing the centrality of war, is given by Bellany (1981: 102): “Security is a relative freedom from war, coupled with a relatively high expectation that defeat will not be a consequence of any war that should occur.” Stephen Walt defines security studies, and by extension the concept of security, as “the study of the threat, use and control of military force’, especially of ‘the specific policies that states adopt in order to prepare for, prevent, or engage in war” (Walt, 1992: 212). The realists share one common proposition that the primary referent or the object of security shall be the state. The field of security studies compartmentalised in itself and ranging from peace research to strategic studies, has also been characterised by an absence of a common understanding of theory building and discipline building in the security puzzle. In this context, Haftendorn (1991:15) argues that the field of security studies “suffers from the absence of a common understanding of what security is, how it can be conceptualised, and what its most relevant research questions are.” She asks whether security “is a goal, an issue-area, a concept, a research program, or a discipline” (ibid, Haftendorn, 03).

As opposite to this brand of realism, which is pessimistic, there are other realist writers who present rather a more optimistic assessment. Contrary to the conventional wisdom, the general propensity of adversaries to compete is not inevitable logical consequence of structural realism (Glaser 1995: 51). Glaser accepts much of the analysis of structural realism, but argues that there are wide range of conditions, which can best achieve their security goals through cooperative policies, rather than competitive ones. Security is therefore to be seen as ‘contingent’ at that time.

The realist tradition is also able to accommodate nonmilitary threats, especially when they are considered as contributing to the increasing threat of war and thus physical insecurity (Vayrynen, 1998:03). Vayrynen argues that “the idea of security can be understood in two ways: either it is viewed as freedom from threats, or it is regarded as social construct which is defined by human communities in their mutual interactions.” (Vayrynen, 1998: 03).

More recently, however, this idea has of security has been criticised for being ethnocentric and too narrowly defined. Instead a number of contemporary writers have argued for an expanded conception of security outward from the limits of the parochial

national security to include a range of other considerations. Richard Ullman was one of the first scholars to criticise the almost exclusive focus on military threat in conventional (realist) thinking of security. Ullman (1983:123) emphasises that “defining national security merely (or even primarily) in military terms conveys a profoundly false image of reality.” In a similar fashion, Joseph Nye Jr. (1988) states that today most security policies are designed to insure “social autonomy as a group, and a degree of political status, not merely to insure the physical survival of individuals within national boundaries.” And, he adds, “a certain minimal expected enjoyment of economic welfare” (Nye, 1988: 06).

The first challenge to realism came from the Liberal theory the foundations of which can be traced back to German philosopher Immanuel Kant. As against the realism, liberals believe that government and democratic processes make it easier to sustain international cooperation, especially when these practices are carried with the help of multilateral institutions (Snyder, 2004: 56). Liberal understanding of security differs in part from that of realists. One version of liberal thought argues that economic interdependence would discourage states from using force against each other because warfare would threaten prosperity. A second strand sees the spread of democracy as the key to world peace, based on the claim that democratic states are by principle more peaceful than authoritarian states. The third type sees institutions such as the United Nations and allied institutions as guaranteeing security to the less powerful states in the international theatre, hence the name liberal institutionalism. This strand made a room available for the concept of human security to be incorporated into the mainstream of the security studies. A subsequent strand, liberal institutionalism, also known as functionalism (or international functionalism), preaches international cooperation as a means to softening antagonism in the international environment. Robert Keohane and Lisa Martin point to the importance of European economic and political institutions in overcoming the traditional hostility between the European countries.

Democratic peace theory has been largely associated with the writings of Michael Doyle and Bruce Russett. Doyle contends that democratic representation, an ideological commitment, an ideological commitment to human rights, and transnational interdependence provides an explanation for ‘peace-prone’ tendencies of democratic

states (Doyle, 1995: 180-184). Supporters of the democratic peace ideas, as a way of promoting international security in the post cold war era, do not only argue that wars between the democracies are not existent, but they also contend that democracies are more likely to settle mutual conflicts of interests short of threat or use of military force.

Constructivism as theory of international relations became prominent in the recent years. It places ideas and interests at the heart of conducting relations in the international arena. Alexander Wendt (1992; 1999) argues that the realist conception of anarchy does not adequately explain why conflict occurs between states. The real issue, he contends, is how anarchy is understood: 'anarchy is what states make of it' (Wendt, 1992). Security and insecurity, from this perspective, are essentially related to the competition and perceived threats between different social groups.

Critical security studies embarked upon a much more ambitious project of human emancipation. The thrust of critical security studies is that the states should not be the centre of analysis because they are not extremely diverse in character but are often the part of the problem of insecurity in the international system. They can be providers of security but they can be a source of threat even to their own people. According too this view, therefore attention should be focused on individual than on the state. Writers like Ken Booth and Wyn Jones argue that security can best be assured through 'Human Emancipation', defined in terms of 'freeing people as individuals and groups, from social, physical, economic and political and other constraints that stop them from carrying out what they would choose to do. In short, critical theorists argue for questioning the dominant narratives and regard them as constructs by the vested interests.

Feminist theorists are in favour of inclusion of gender in security studies. Feminists like Ann Tickner (1992) argue that if gender is brought more explicitly into the security studies, not only will new issues and alternative perspectives be added to security agenda, but also the result will be a fundamentally different view of nature of international security.

Recent years have seen the emergence of postmodern approaches to the study of international relations, which has produced somewhat distinctive perspective towards international security. Post-Modernists share the view that ideas, discourse and the logic

of interpretation are crucial in understanding international politics and security. Like other writers who adopt critical security studies approach to international security, post-modernists see Realism as 'one of the central problems of International Security'. This is because, argue post modernists, Realism is a discourse of 'Power and Rule' which has been dominant in international politics in past and which has encouraged security competition between the states.

The end of the cold war marked a new beginning in the field of security studies. The need to broaden the agenda of the security was largely felt within the strategic circles in the view of the newly emerging threats. The broadening and the deepening dimension concerns the extension of security to other issues or sectors than the military one, moving either down to the level of individual or human security or up to the level of international or global security, with regional and societal security as possible intermediate points (Krause and Williams, 1996:230; also Buzan, 1991; Waever et al., 1993; Wyn Jones, 1999). The widened scope was to include issues as diverse as environmental security, food security, economic security, health security, personal security, community security and political security (UNDP: Development Report 1994). The most influential articulation arguably of the concept of human security comes from the United Nations Development Program (1994). Human security is defined as: 'first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and 'hurtful disruptions in the patterns of daily life -whether in homes, in jobs or in communities. Such threats can exist at all levels of national income and development' (United Nations Development Program, 1994: 23). Although apprehensions were raised about the feasibility of the concept, it was readily endorsed by policy makers within the security frame work (Kanti Bajpai, 2000: 02). King and Murray (2001) suggest a way to measure human security by using five key indicators of 'well being' namely, income, health, education, political freedom, and democracy. It was under this framework of the human security that the health security was located. Though health security figured in the newly developed framework, but it does not figure prominently in the mainstream IR theory. Most of the literature of on health security in general and pandemics in particular is available in the sphere of biosciences most of which traces its physiology and focuses on the epidemiology.

World Health Organisation has carried out several studies in the field, which are dealt with in the third chapter of the research work. The relatively rapid spreads of AIDS, tuberculosis, malaria, anthrax and the incredibly fast propagation of SARS-highly contagious form of pneumonia- figure prominently in discussions on the emerging new security threats (Albert 2001: 791). There is a paucity of the literature, which could establish linkages between the security as a concept and the pandemics, hence this research has the scope to fill in the gap, for the same reason it is mostly exploratory in nature.

The research work at the outset was premised on the following hypotheses:

- The study of pandemics in the discourse on security is overshadowed by the traditional state centric concerns of security against external armed threats.
- Extensive diagnostic and surveillance and multilateral networks, as well as novel vaccine and antiviral development strategies, which can limit the impact of pandemics, are lacking.
- The pandemic experience permits no easy generalisations about the future. Based on a limited store of unequivocal evidence, it is not easy to forecast either the source, or the severity of future pandemics.

The following questions were sought to be answered in the research work:

- Why is it that the study of the protection from pandemics does not figure so prominently in the dominant discourse on security despite the claims of broadening of the agenda?
- What is the most effective utilisation of available therapeutic and other resources to minimise the impact of the outbreak of the pandemics in the near future?
- How have been the pandemics perceived by the public and what are the social consequences of the outbreak and the responses?

The study is mostly exploratory in nature, as not much work has been done on the topic. The study conducts a survey of the evolution of discourse on changing notions of security. The study is, in this sense, deductive, historical, descriptive and analytical. In terms of research data, essentially a qualitative focus has been retained. Quantitative data has been used to substantiate arguments with empirical evidence. Mostly secondary

sources were employed. They include declassified documents and reports available at various libraries and institutions especially at the offices of the World Health Organisation (WHO). Books and academic journals were of significant importance to get different perspectives on the issue. Regional strategic surveys, yearbooks and data surveys were consulted along with other normal sources of information. On the whole, multiple sources of data were conceived to validate deductions leading to meaningful conclusions. Newspaper archives were used to provide day-to-day updates pertaining to the issue in hand. The Internet sources were used judiciously.

Organisation of the research work

The second chapter of the study traces the evolution of the security studies from the state centric notions of military security to an increased thrust on the human security, through economic and environmental security. An explanation for the shift is also attempted in the chapter. A survey of the academic literature on definitions, categorisations and dimensions of security is carried out. Analysis of the key debates in the field of security studies and different theoretical traditions that underlie them is also carried out.

The focus of third chapter is on the history of pandemics. An attempt is made to put in perspective the generally agreed upon definitions. The chapter highlights the disaster ridden legacy of pandemics and the havoc they have perpetrated throughout the human history. The future emergence of pandemics in more virulent strains has been contextualised. The effects of economic, political and environmental fallouts of the spread of infectious disease are provided.

The fourth chapter focuses attention on the survey of the response mechanisms adopted in past and in place currently so as to judge their effectiveness. The chapter focuses on the politics underlying the responses to the pandemic security. Responses by the dominant theories in intentional relations are underlined. Multilateral institutional responses at the international level are dealt in detail.

The concluding chapter sums up the findings of the research. The inferences arrived are put to scrutiny. An attempt has been made to explain the reasons for the lack of attention by the international relations scholars towards pandemics.

Chapter Two

Changing Dynamics of International Security

This chapter will provide a historical overview of the evolving concept of security. A survey of the academic literature on definitions, categorisations and dimensions of security will be carried out. Hereafter, analysis of the key debates in the field of security studies and different theoretical traditions that underlie them will be carried out. Analysis of the changing security discourse will be carried out to provide a better understanding of multiple extensions of the concept of security. It is argued that each of these theoretical traditions offers a particular view of the concept of security and on the means for ensuring security. The evolution of the security paradigm and the changes in conceptions of security, each based on different theoretical assumptions, are closely linked to the historical evolution of the international system and the intellectual progress in its interpretation. The remainder of this chapter discusses the diverse dimensions of security, focusing on the inclusion of pandemics as a subset within the broader domain of Human security. A summary of the extensions of the concept of security in recent years will be given at the end.

Introduction

The concept of security has evolved considerably over the years. Traditionally, security was defined primarily at the nation-state level and almost exclusively through the military prism. This focus on external military threat to national security was particularly dominant during the Cold War. The dominant concept of security during the Cold War was intimately linked to realist theory, which focuses on states' behavior in ensuring security by military means. This concept linked security with military issues and the state-centered use of force. Four themes dominated security studies during the Cold War can be identified as; balance of power, bipolar world, containment and deterrence. The end of the cold war heightened the debate on the future of the international security. The new research agenda become broader in its focus. Several research scholars focused their

attention on the issues falling outside the domain of the state-centric conception of the security. It was argued that it is misleading to confine security analysis to traditional military threats to the territorial integrity of states (Barry Buzan, 1991; Richard Ullman, 1983). A need was felt to broaden the agenda of the security studies. As in opposition to the traditional military threats, non-military sources of threat now seemed more prominent.

Much of the scholarship in the years following the end of the cold war was dominated by the conceptions of ethnic and civil wars as were witnessed in many regions of the world in the nineties. The theme of globalisation as a threat to the sovereignty and territorial integrity of the states, as a cult of cultural imperialism figured prominently in the discourse on security. Other themes, as a part of the broadening agenda were to include such diverse issues as economic, social, political stability, ecological, demographic and international migration. In this sense the focus shifted to entities other than the state, moving down to the level of individual or human security.

Concept of Security

There is no agreement on the concept of security. There is a consensus that it implies freedom from threats to core values for both individuals and groups, but there is a major disagreement about whether the main focus of enquiry should be on individual, national or international security. It is a widely contested concept, which defies pursuit of a generally agreed definition. The concept refers to different sets of issues, purposes and values, often closely reflecting conflicting theories in International Relations. Despite the continued efforts by the international relations scholarship to broaden its agenda, no coherent and widely acceptable definition of the term 'security' could be established. (Buzan, 1991: 15-16). According to Buzan (1991: 01), the concept of security is, in much of its prevailing usage, 'so weakly developed as to be inadequate for the task.' Buzan suggests four explanations for what he calls 'the persistent underdevelopment of thinking about security'. These include the complexity of the concept, overlap between the concept of security and concept of the balance of power, objections to realist position, interest in maintaining the ambiguity of the concept.

There is no agreement on the concept of security. Notwithstanding the wide range of studies of security published over the years, no single generally accepted definition of security has been produced. Security has many meanings, some of which are not necessarily linked to conventional understandings. For much of the cold war period most of the writings on the subjects were dominated by the idea of national security. This narrow definition of security, consistent with the realist tradition, would call for military response by the state to defend its territorial sovereignty and its citizens. The realist tradition is also able to accommodate nonmilitary threats, especially when they are considered as contributing to the increasing threat of war and thus physical insecurity (Vayrynen, 1998: 03). Traditionalists in the field of security studies regarded the concept of security in exclusively military and state-centered terms, equating security with military issues and the use of force. In practice the focus of realism is primarily on interstate rivalries for military power and economic and natural resources. Vayrynen argues that “the idea of security can be understood in two ways: either it is viewed as freedom from threats, or it is regarded as social construct which is defined by human communities in their mutual interactions (Vayrynen, 1998: 03). The focus on military threats and the use of force 'complemented ideas of power and interest and the rather tough-minded approach to foreign policy which seemed appropriate for the Cold War years' (Garnett, 1996a: 12). An example of a traditional definition of security, stressing the centrality of war, is given by Bellamy (1981: 102): “Security is a relative freedom from war, coupled with a relatively high expectation that defeat will not be a consequence of any war that should occur.” Walt defines security studies, and by extension the concept of security, as “the study of the threat, use and control of military force', especially of 'the specific policies that states adopt in order to prepare for, prevent, or engage in war” (Walt, 1991: 212). Walt emphasizes that military power is the central focus of the field, yet he concedes that 'military power is not the only source of national security, and military threats are not the only dangers that states face' (1991: 213). Security is about survival. It is when an issue is posing an existential threat to a designated referent object. This special nature of security threats justifies the use of extraordinary measures to handle them.

The invocation of security has been a key to legitimising the use of force, but more generally it has opened the way for the state to mobilize, or take special powers to handle existential threats. These existential threats can be understood in relation to a particular referent object in question (Buzan et al, 1998: 21). In military sector, the referent object is usually state, although it may also be the other kinds of political entities. Similarly, the referent objects are quite different in economic, political and environmental areas. The field of security studies compartmentalised in itself and ranging from peace research to strategic studies, has also been characterized by an absence of a common understanding of theory building and discipline building in the security puzzle. In this context, Haftendorn (1991: 15) argues that the field of security studies 'suffers from the absence of a common understanding of what security is, how it can be conceptualized, and what its most relevant research questions are.' She asks whether security 'is a goal, an issue-area, a concept, a research program, or a discipline' (ibid, 03).

More recently, however, this idea of security has been criticized for being ethnocentric and too narrowly defined. Instead a number of contemporary writers have argued for an expanded conception of security outward from the limits of the parochial national security to include a range of other considerations. Barry Buzan in his study, *People, States and Fear*, argues for a view of security, which includes political, economic, societal, and environmental as well as military aspects. Generally speaking, military security concerns the two-level interplay of the armed offensive and defensive capabilities of states, and states' perceptions of each other's intentions. Political security concerns the stability of states, systems of government and the ideologies that give them legitimacy. Economic security concerns access to the resources, finance and markets necessary to sustain acceptable levels of welfare and state power. Societal security concerns the sustainability, within acceptable conditions for evolution, of traditional patterns of language, culture and religious and national identity and custom. Environmental security concerns the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend. These five sectors do not, Buzan (1991: 19-20) stresses, operate in isolation from one another. Each one defines a focal point within the security problem, but all are woven together in a web of linkages. Buzan's work raises interesting and important questions about whether

national and international security considerations can be compatible and whether states, given the nature of international system, are capable of thinking in a more cooperative way.

It was in the late 1980s and 1990s the concept of security became more prominent and in some ways better developed than Buzan claimed. Garnett (1996a: 12) argues that 'security' has actually become an overdeveloped concept, 'so wide in its scope that it is in danger of being emptied of meaning.' However, according to Baldwin, many recent works on security would not qualify as serious conceptual analysis. He argues that although none of Buzan's explanations are convincing, security should still be described as a 'neglected concept': "Paradoxical as it may seem, security has not been an important analytical concept for most security studies scholars. Security has been a banner to be flown, a label to be applied, but not a concept to be used by most security studies specialists" (Baldwin, 1997: 09).

All writers on security do not accept the focus of tension between the national and international security. There are those who argue that emphasis on the states and interstate relations ignores the fundamental changes, which have been taking in world politics especially in the aftermath of the cold war. For some, the dual processes of integration and fragmentation, which characterise the contemporary world, mean that much more attention should be given to the societal security. According to this view, growing integration in regions like Europe is undermining the classical political order based on nation states, leaving much exposed within larger political frameworks like the European Union. At the same time, the fragmentation of the various states like the Soviet Union and Yugoslavia has created new problems of boundaries, minorities and organizing ideologies, which are causing increasing regional instability. This leads to the argument that ethno-national groups, rather than states, should become the centre of attention for security analysis.

At the same time there are other commentators who argued that the stress on national and international security was less appropriate because of the emergence of the embryonic global society in the post-cold war period. They argued that more attention should be given to the global society and not to the ethno-national groups. They are of the opinion that most important contemporary trends is the broad process of globalisation

which has taken place. They accepted that this process brings new risks and dangers. These include the risks associated with such things as international terrorism, a break down of the global monetary system, global warming and the dangers of nuclear accidents. These threats to security on the planetary level are viewed as being outside the control of nation states. Only development of global community, they believe can deal with it adequately.

At the same time, there are other writers on globalisation who stress the transformation of the state and on evolving a new security agenda. In the aftermath of 9/11 and the new era of violence which followed it, violence has become globalised and fragmented at the same time and is no longer a question of wars between nation states but of sub-state conflicts, globally networked and financed, in which states have become one actor, increasingly privatized, amongst others (Friedman, 2003: 09).

Thus, the concept of international security does not lend itself to neat and precise formulation. It deals with a wide variety of risks about whose probabilities we have little knowledge and of contingencies whose nature we can only dimly perceive. Security has long been by and large a matter of the state, executed in the formulation of foreign and defense policies. Since the end of the Cold War, however, many security issues have become increasingly transnational. The subject has widened and broadened to include commonly perceived new challenges that cannot be countered effectively at the level of the nation-state.

Historical Evolution

States have traditionally been, and largely remain the primary referent objects for military security. Protecting the territorial integrity of the state is the traditional object of the military security and the two immediate concerns being regional and domestic security. Security being the feeling safe from harm or danger. Actors in the international system are often willing to exert too much attention and resources towards securing this end. In thinking about security in this paradigm the things that come to ones mind include among others safety of the state from attacks with possibility of war. These issues are indeed important considerations in the study of the security, and during cold war it was these issues that dominated the arena of the international security studies. Going back in the

history the concept of the security can be traced to Thomas Hobbes, whose main aim for the creation of the state was to provide for the protection of the lives of its subjects. Hobbes, did not allow, for the revolution in his contract theory, as he felt that it would push the subjects back in to that state of nature. But it is significant to mention that, he conferred the right of revolt against the state, if it fails to provide the requisite protection. From then onwards, several political philosophers in the line, directly reinforced this view of the state, as a result consensus was generated around this line of thinking- that security means a protection from threats and external interventions. This focus on external military threat to national security was particularly dominant during the Cold War. But, it would be misleading, to associate the origins of security studies with the Cold War and the attendant nuclear threat. The interwar period was of significance to the development of security studies. During this period scholars stressed that democracy, international understanding and arbitration were the main ways to promote peace and security. The new international system was viewed as a 'community of power' in which all states would cooperate in the common cause of providing security and justice for all rather than engaging in competition and coercion (Haftendorn, 1991: 07).

For too long especially during the cold war the concept of security was shaped by the potential for conflict, it has been equated with the threats to a country's borders and towards securing these ends the nations have sought arms to protect their security. Initially, in a narrow realist and neo-realist approach military security was an attribute of the relations between the nations. It was also referred to as international security. The idea of international security embraces many different types of units ranging from individuals, through states and nations to such alliances and blocs (Booth, 1991:39). It follows from this conception that security means as an absence of threat or a situation in which the occurrence of that threat could be prevented. The central problem in the study of the security during the cold war era was simply, that there was no consensus on what the security is. Throughout the Cold War era, several different approaches to security were developed in relation to the conflict between the 'East' and 'West'. The driving force in this debate was the presence of nuclear weapons, which altered international relations and security studies fundamentally because of its destructive force. For the first time in history weapons were produced that were capable of destroying the entire world. This

historical discontinuity in weapons technology had a profound effect on academic and policy discourse.

During the Cold War, the Soviet Union and United States dominated international politics as opposing superpowers. Their influence spread over almost every aspect of the international climate, and many countries were affected by this division, which resulted in 'the first true polarization of power in modern history' (Gaddis, 1987: 221). An understanding of the bipolar structure was that the US and the Soviet Union were locked in a battle for world dominance, or at least in a struggle for their relative positions within the world system. Other dominant themes during the cold war period in the security can be identified, these are; balance of power, containment and deterrence.

The end of the cold war heightened the debate on the future of national and international security. The new research agenda become broader in its focus. Several research scholars focused their attention on the issues falling out side the domain of the state centric conception of the security. The end of the cold war stunned policymakers and academics alike. None of the existing international relations or security studies had predicted the end of an era that had kept the world in a tight grip. Discussions within the academia about the credibility and validity of the existing theories of international relations erupted. It was argued that it is misleading to confine security analysis to traditional military threats to the territorial integrity of states. A need was felt to broaden the agenda of the security studies. As in opposition to the traditional military threats, non-military sources of threat now seemed more prominent. From the early 1990s onwards, a number of major scholarly debates co-shaped thinking about security. The end of the Cold War offered scholars of international relations and security studies an opportunity to focus on subjects other than deterrence theory and balance of power. Other issues soon gained heightened attention. One of the most influential issues in this respect is the concept of globalization. Much of the scholarship in the years following the end of the cold war was dominated by the conceptions of ethnic and civil wars as were witnessed in many regions of the world in the nineties. The theme of globalisation as a threat to the sovereignty and territorial integrity of the states, as a cult of cultural imperialism figured prominently in the discourse on security. Global crimes, of which drug trafficking, human trafficking; money laundering and internet-based crimes, money laundering, and

particularly its connection to transnational terrorism, has received widespread interest from academics and policymakers alike in recent years. The link between terrorism and global crime reflects the wider debate of the nation state versus non-state actors in the international system. Particularly complex about these criminal networks is that they are extremely flexible and operate on a global level, which makes them very hard to control for an individual state. Thus, the need to broaden the concepts of security was rightly felt in both the academic and policy circles.

Broadening Agenda

The end of the cold war marked a new beginning in the field of security studies. The need to broaden the agenda of the security was largely felt within the strategic circles in the view of the newly emerging threats. The broadening and the deepening dimension concerns the extension of security to other issues or sectors than the military one, moving either down to the level of individual or human security or up to the level of international or global security, with regional and societal security as possible intermediate points (Krause and Williams, 1996: 230). The widened scope was to include issues as diverse as environmental security, food security, economic security, health security, personal security, community security and political security (UNDP: Development Report 1994). Thus, the themes, as a part of the broadening agenda were to include such diverse issues as economic, social, political stability, ecological, demographic and international migration. In this sense the focus shifted to entities other than the state, moving down to the level of individual or human security.

Richard Ullman was one of the first scholars to criticize the almost exclusive focus on military threat in conventional (realist) thinking of security. Ullman (1983: 123) emphasizes that 'defining national security merely (or even primarily) in military terms conveys a profoundly false image of reality.' He argues that the emphasis on military threats arising from beyond the borders of one's own country is doubly misleading. First, it draws attention away from the non-military threats that may undermine the stability of nations. Second, it presupposes that threats arising from outside a state are somehow more dangerous to its security than threats that arise within it. In a similar fashion, Joseph Nye Jr. (1988: 06) states that today most security policies are designed to insure 'social

autonomy as a group, and a degree of political status, not merely to insure the physical survival of individuals within national boundaries.' And, he adds, 'a certain minimal expected enjoyment of economic welfare.'

Ullman and Nye's definitions of security take account of a broad variety of contingencies, but they also raise questions of applicability. Haftendorn (1991: 05) argues that these definitions must be seen in their specific cultural context: the highly industrialized democracies of the West. Other countries may have very different conceptions of security. Many developing countries appear to emphasize the domestic as well as the economic and social dimensions of security. Scholars of security studies have long neglected the security situation in the Third World, where most members of the international system are located and where most of the conflicts are concentrated (Ayoob, 1997: 123).

Theoretical approaches to International Security Studies

Different theoretical streams have over the years tried to propound their own notions and interpretations of the concept of security according to their ideological lineages. The study of international relations can be viewed as a continuing competition between a numbers of theoretical traditions. These International Relations (IR) theories not only influence the discourse of security studies, but they also shape both public discourse and policy analysis (Walt, 1998: 29). Close examination of different theoretical strands as they have been applied to international security studies can generate a more profound understanding of the concept. Theoretical approaches to study of international security can be carried under the following sub heads:

Realism

Historically the term security was used mainly in the military sense as protecting the borders or defending the territorial integrity and national sovereignty of a state. National security was viewed as a goal to be pursued by military means. This notion of security was intimately linked to the realist approach, the tradition which maintains that "interest" is all that what matters in the international relations, that states are guided by the pursuit

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of power (Kenneth Waltz, 1979). Realism has been the most dominant theoretical tradition in international relations and security studies. In the historical debate about how best to achieve national security writers like Hobbes, Machievalli, and Rousseau tended to paint a rather pessimistic picture of the implications state sovereignty. The international system was viewed as rather brutal arena in which states would strive to achieve their own security at the expense of their neighbors. Inter sate relations were seen as struggle for power as sates constantly tend to take advantages of each other. According to this view permanent peace was difficult to achieve. What all the states could do at best was to try to achieve balance of power so as to prevent over all hegemony of a single power. This view was shared by writers like E. H Carr and Hans Morgenthau, who developed as what came to be known as 'Classical Realism' school of thought. Hans Morgenthau, believe that states, like human beings, have an innate desire to dominate others, which leads them to fight wars (Morgenthau: 1948). In this perspective, state power is an end in itself (Glaser, 1994: 53). Morgenthau also stressed on the relevance of the classical, multi polar balance-of-power system and saw the bipolar rivalry between the US and the Soviet Union as especially dangerous. The key realist assumption-the International system is anarchic, states claiming sovereignty would do everything to protect the same, uncertainty and lack of trust in the International system, survival as the primary motive of the states- underline the key principles of thinking as established and propagated by this school of thought.

Kenneth Waltz, *Theory of International Politics* (1979) set the tone for some of the most controversial methodological and theoretical debates in IR in the 1980s and the 1990s. Within the empiricist/positivist tradition of IR, the advent of neorealism or structural realism generated the neo-realist/neo-liberal debate on the meaning of anarchy, the nature of state conflicts and the possibility of cooperation in security affairs. It maintains that States act as independent, sovereign political units that focus on their own survival (or expansion). For that reason, the objective of national security is survival of the nation-state rather than the guarantee of international security (Haftendorn, 1991: 08). It has several variants: classical realism and neo realism, and offensive realism versus defensive realism. National security is largely as a result of the structure of international system. Neorealists of whom Kenneth Waltz is most prominent stress focus on the



international system. Neo realists see the international system consisting of a number of great powers, each seeking to survive, hence a state of perpetual threats shapes behaviour of the states in the international system, and power becomes a mean to achieve the end of security (Glaser, 1994: 53). According to this line of thinking the international system is likely to be as violent and as offensive as it has been in past, as Waltz writes, “ structures endure and events repeat them selves endlessly”.

Offensive realist John Mearsheimer (1990; 2001) asserts that the search for power and security is unending. In an important article entitled ‘Back to Future’ written in 1990, Mearsheimer argued that the end of cold war was likely to usher in a return to traditional multilateral balance of power politics of the past in which extreme nationalism and ethnic rivalries would lead to wide spread instability and conflict. Mearsheimer viewed cold war as period of peace and stability brought about by the bipolar structure of power which prevailed. With the collapse of this system, he argued, that there would be return to the kind of great power rivalries. For neo realists like Mearsheimer, international politics may not be characterised by constant wars but nevertheless a relentless security competition is always possible. It is accepted that cooperation among the sates can and does take place but within certain limits. It is ‘constrained by dominant logic of security competition, which no amount of cooperation can eliminate.

As opposite to this brand of realism, which is pessimistic, there are other realist writers who present a rather more optimistic assessment. Contrary to the conventional wisdom, the strong general propensity of adversaries to compete is not inevitable logical consequence of structural realism (Glaser 1995: 51). Glaser accepts much of the analysis of structural Realism, but argues that there are wide range of conditions, which can best achieve their security goals through cooperative policies, rather than competitive ones. Security is therefore to be seen as ‘contingent’ at that time. The structural Realists or the neo-Realists also share the view that it is possible to ameliorate security dilemma through greater cooperation between sates. Barry Buzan has argued that one of the significant features of the 1980s and 1990s was the gradual emergence of a rather more ‘mature anarchy’ in which states recognize the intense dangers of continuing to compete aggressively in a nuclear world.

Despite the varieties of realist thought, all realists stress the centrality of military

threat and the use of force. The referent object of security is the state; states act as strategic, self-interested units, which seek to ensure their own security. It will be seen in a later part of this chapter, that the realist concept of security has been severely criticized as being too 'narrow' to account for the multiple dimensions of security.

Liberalism

The first challenge to realism came from the Liberal theory the foundations of which can be traced back to German philosopher Immanuel Kant. As against the realism, liberals believe that government and democratic processes make it easier to sustain international cooperation, especially when these practices are carried with the help of multilateral institutions (Snyder, 2004: 56). In the liberal view, the state is not a hypothetical single, rational actor in a state of war, but a coalition or conglomerate of coalitions and interests, representing individuals and groups. A central principle of liberalism is the importance of the freedom of the individual. Foreign policy should reflect the rights and duties of individuals. Liberalism, like Realism is not a single theory, Liberals' understanding of security differs in part from that of realists. One version of liberal thought argues that economic interdependence would discourage states from using force against each other because warfare would threaten prosperity. A second strand sees the spread of democracy as the key to world peace, based on the claim that democratic states are by principle more peaceful than authoritarian states. The third type sees institutions such as the United Nations and allied institutions as guaranteeing security to the less powerful states in the international theatre. Hence the name liberal institutionalism. This strand made a room available for the concept of human security to be incorporated into the mainstream of the security studies. It is also known as functionalism (or international functionalism), preaches international cooperation as a means to softening antagonism in the international environment. The third strand of Liberalism, operates largely within the Realist frame work, but argues that international institutions are as much more important in helping to achieve cooperation and stability, hence security. According to Keohane and Martin (1995: 42), "institutions can provide information, reduce transaction costs, make commitments more credible, establish focal points for coordination and, in general, facilitate the operation of reciprocity." Supporters of these ideas point to the importance

of European economic and political institutions in overcoming the traditional hostility of the European states. They also point out to and the developments in the European Union and the NATO in the post cold war era to demonstrate that by investing major resources states themselves clearly believe in the importance of institutions. According, to this line of argument, if states were only influenced by narrow calculations of power, European Union and NATO would have withered away at the end of the cold war. In fact the reverse has happened; both retain their vitality at the moment and are engaged in a process of expansion. This is not to say that institutions can prevent wars from occurring, but they can help to mitigate the fears of cheating and alleviate fears, which sometimes arise from unequal gains from cooperation. It is suggested that in a world constrained by state power and divergent interests, international institutions operating on the basis of reciprocity at last will be a component of lasting peace. In other words international institutions are themselves unlikely to eradicate the war from international system, but they can play a part in helping others to achieve greater cooperation between states.

Another Liberal approach to international security has gathered momentum in the post cold war world. The central argument of this approach is that democratic states not tend to fight wars to other democratic states. Democracy is, therefore, seen a major source of peace, and consequently security. Democratic peace theory has been largely associated with the writings of Michael Doyle and Bruce Russett. Doyle contends that democratic representation, an ideological commitment, an ideological commitment to human rights, and transnational inter dependence provide an explanation for 'peace-prone' tendencies of democratic states (Doyle 1995: 180-184). Equally, the absence of these attributes, he argues, provides a reason why non-democratic tend to be war prone. Supporters of the democratic peace ideas, as a way of promoting international security in the post cold war era, do not only argue that wars between the democracies are not existent, but they also contend that democracies are more likely to settle mutual conflicts of interests short of threat or use of military force. The idea is that the democratic states do have clash of interests, but they are more likely to engage normative and diplomatic efforts to sort out the differences, in place of the military force. Much more than states they settle their disagreements through mediation, negotiation or other forms of peaceful diplomacy. The democratic peace arguments are not deigned to reject Realism

completely but to suggest, that, liberal democracies do make a rather more of differences in the international system than Realist writers accept. Bruce Russett has argued that there is no need to jettison the insights of Realism, which tells us that power and strategic considerations affect states' decision to fight each other. But neither should one deny the limitations of those insights, and their inability to explain many instances when liberal states choose not to fight or threaten one another. For Russett the danger resides in 'vulgar realism's vision of war of all against all, in which threat that other states pose is unaffected by their internal norms and institutions' (Russett 1995: 175). Democratic peace theory is actually based on Kantian logic that emphasised three elements: republican democratic representation, an ideological commitment to Human rights and, transnational interdependence.

Both neorealists and neoliberal institutionalists are blinkered by their common assertion that all important relationships within the international system are anarchic. International relations is a diverse system composed of a range of institutions, some anarchic, some hierarchic. Identifying the elements of hierarchy at the core of both the Cold War and Gulf War reveals how taking anarchy as the determining characteristic of international politics—although useful in some circumstances as a simplifying device—actually distorts our vision.

Social Constructivism

The notion that international relations are affected not only by power politics but also by ideas is shared by the writers who call themselves as 'Social Constructivists.' According to this view fundamental structures of international politics are social rather than strictly material. Social constructivists like Alexander Wendt share many of the assumptions of realism about world politics. He accepts that states are a key referent point in the study of international security; that the international system is anarchic, that the states often have offensive capabilities, that the states cannot be certain of the intentions of the other states, that the states have the fundamental wish to survive and, that states attempt to behave rationally. However, the social constructivists think of international security in a very different way. They think that the structure is the product of social relationships. Social structures they think are made up of elements like shared knowledge, material resources

and, practices. Wendt argues that security dilemma is a social structure composed of inter-subjective understandings in which states are so distrustful that they make worst case assumptions regarding each others intentions and as a result define their self interests in 'self help' terms (Wendt 1992). Thus according to this line of reasoning the security dilemmas and wars are a result of self-fulfilling prophecies. Although the social constructivists agree on the point that security dilemmas are not the acts of God, they differ over whether they can be escaped or not. For some, given the fact that structures are socially constructed does not necessarily mean that they can be changed. Others are however optimistic about the possibility of the same.

Critical Security Studies

Despite the differences between social constructivism and Realism about the relationship between ideas and material factors they agree on the central role of the states in debates about international security. There are other theorists, however, who believe that the state has been given much prominence. Keith Krause and Michael Williams have defined critical security studies in the following terms; "contemporary debates over the nature of security often float on a sea of unvoiced assumptions and deeper theoretical issues concerning to what and to whom the term security refers... what most contributions to the debates thus share are two inter-related concerns: what security is and how we study it." (Krause and Williams 1997: 34). What they also share is to de-emphasise the role of the state and reconceptualise the security in different way. What might be termed alternative security studies includes a number of different approaches. These include critical theory and emancipation, feminist approaches and post-modernist approaches.

Critical theory

Robert Cox draws a distinction between problem solving theories and critical theories. Problem solving theories work within the prevailing system. They take the existing social and political relations and the institutions as starting points for analysis and then try to find out how these can be ameliorated or solved. (Smith, 2000). In contrast critical

theorists focus attention on the ways by which these institutions and systems came into being and try to find out the possible ways of changing them. For critical security theorists, states should not be the centre of analysis because they are not extremely diverse in character but are often the part of the problem of insecurity in the international system. They can be providers of security but they can be a source of threat even to their own people. According too this view, therefore attention should be focused on individual than on the state. With this in their view, writers like Booth and Wyn Jones argue that security can best be assured through ‘Human Emancipation’, defined in terms of ‘freeing people as individuals and groups, from social, physical, economic and political and other constraints that stop them from carrying out what they would choose to do.’ This focus on emancipation is designed to provide a ‘theory of progress’, a ‘politics of hope’, and a guide to ‘a politics of resistance’ (Booth 1999). The critical theorists argue for questioning the dominant narratives and regard them as constructs by the vested interests.

Feminist Approaches

Feminist writers also challenge the traditional approach of the central role of the states in the study of international security. While there are significant differences between the feminist theorists, all share the view the international politics in general and international security in particular have been written from a masculine view point. Tickner argues that women have seldom been recognized by the security literature despite the fact that in conflicts affect women, as much as if not more than men. The vast majority of casualties in war are women and children and the rape of women is used as tool in the war (Tickner 1992). Feminists argue that if gender is brought more explicitly into the security studies, not only will new issues and alternative perspectives be added to security agenda, but also the result will be a fundamentally different view of nature of international security. In other words, feminists are against the men centric conception of security studies and want gender bias be eliminated from the same. They are in favour of a gender balance in international security studies.

Post-Modernist Views

Recent years have seen the emergence of postmodern approaches to the study of international relations, which has produced somewhat distinctive perspective towards international security. Post-Modernists share the view that ideas, discourse and the logic of interpretation are crucial in understanding international politics and security. Like other writers who adopt critical security studies approach to international security, post-modernists see Realism as 'one of the central problems of International Security'. This is because Realism is a discourse of 'Power and Rule' which has been dominant in international politics in past and which has encouraged security competition between the states. Power politics is seen as an image of the world that encourages behaviour that helps bring about war. The attempt to balance the power is in itself an act of war. The alliances that are created to promote peace act in a reverse direction there by giving birth to wars and conflicts. The post-modernist, therefore, want the Realist discourse on war and power be replaced by some alternative interpretations of concepts such as danger and what counts as threats to national security. For post-modernists, security and subjectivity are closely connected. One of the central differences between the realists and post-modernists is their very epistemologies, that is, the ideas about knowledge. Post-Modernists argue that there are no secure, uncontested and timeless foundations of making choices about interpretations. This leads back to the view of theory as ideology, and as such there is no such thing as value-free enquiry.

Realism is not only seen as a static ideology largely away from the touch of changing realities of the international politics, but also as a dangerous discourse and as a main obstacle toward building a more peaceful and cooperative world. This is because it purports to provide a universal view of how the world is organized and what states should do in order to survive. The problem with the Realism according to this view is that, if the complexities of the world are reduced to single rigidly ordered framework of understanding, alternative approaches to international security are ruled out. If the world is thought to be anarchic, then power politics would be thought of as a solution to the problem. This line of thinking leads the post-modernists to open up alternative courses of study of the world security and to open up a new debate about the issues that have been marginalized and ignored. Jim George has argued that in the new post cold war strategic

discourse 'attention has been focused on the growing sense of insecurity concerning military involvement in military-industrial affair and the perilous state of global economy. Questioned, too, has been the fate of those around the world rendered insecure by lives lived at the margins of existence yet accounted for in the statistics on military spending and strategic calculations' (Goerge1994). George argues that such questions require a new communitarian discourse about security.

Post-Modernist writers believe that not only is it essential to replace Realism with communitarian discourse but that it is an achievable objective. The whole nature of global politics can be transformed and the traditional security dilemma can be overcome, if post-modern epistemic communities play their part in spreading communitarian ideas.

Human Security

The proponents of the human security argue that the proper referent for security should be the individual rather than the state. Conventional definitions of security have been challenged in discussions within the academia, and within international relations in particular. Human security holds that a people-centered view of security is necessary for national, regional and global stability. Human security is an emerging paradigm for understanding global vulnerabilities whose proponents challenge the traditional notion of national security by arguing an individual center focus of international security. With constant meddling with the broadening agenda it was ultimately reduced to the level of Human security. Dr. Mahbabul Haq was first drew the attention of the world community to the concept of human security in the United Nations Development Programme's 1994 'Human Development Report' and sought to influence the UN's 1995 World Summit on Social Development in Copenhagen. Thus, the highest profile articulation of the concept of human security comes from the United Nations Development Program (1994). Human security is defined as: 'first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life -whether in homes, in jobs or in communities. Such threats can exist at all levels of national income and development' (United Nations Development Program, 1994: 23). This report on Human development is considered a milestone in the field of

human security. The slogan, “freedom from fear” and “freedom from want” become a buzzword in the academic and policy circles. Seven areas of security were recognized by the report; economic security, food security, environmental security, health security, personal security, community security and political security. Global threats to human security in the twenty-first century are said to include at least seven categories: unchecked population growth; disparities in economic opportunities; excessive international migration; environmental degradation; drug production and trafficking; international terrorism; and Pandemics. These threats to human security are caused more by the independent actions of millions of people rather than deliberate aggression by specific states.

Although the definitions of human security vary, most agree on it as being concerned with the welfare of the people. Kanti Bajpai defines human security as “security that is centered above all on the sanctity of the individual may be called human security” (Bajpai, 2003: 196). The concept of Human security suffers from the same limitations as were seen in case of the concept of the Security in general, that is there is no clearly agreed upon definition of the Human Security. Ronald Paris says that; “Two problems, in particular, limit the usefulness of the human security concept for students and practitioners of international politics. First, the concept lacks a precise definition. Human security is like “sustainable development”—everyone is for it, but few people have a clear idea of what it means. Existing definitions of human security tend to be extraordinarily expansive and vague, encompassing everything from physical security to psychological well-being, which provides policymakers with little guidance in the prioritization of competing policy goals and academics little sense of what, exactly, is to be studied”(Paris, 2000: 88). King and Murray (2001) suggest a way to measure human security by using five key indicators of 'well being' namely, income, health, education, political freedom, and democracy. In addition to protecting the state from external aggression, human security would expand the scope of protection to include a broader range of threats, including environmental pollution, infectious diseases and economic deprivation.

Security from pandemics thus comes, under the broad category of human security. We are increasingly confronted with new or newly emerging virus infections of humans

and animals, yet not much attention has been paid to tackle the deadly viruses and infections which cause millions of deaths every year round the globe. Though, health security figured in the newly developed framework it does not figure prominently in the mainstream IR theory. Most of the literature on health security in general and pandemics in particular is available in the sphere of biosciences most of which traces its physiology and focuses on the epidemiology. World Health Organization has carried out a lot of studies in the field, which would be dealt in with during the course of the progression of the research. The relatively rapid spreads of AIDS, tuberculosis, malaria, anthrax and the incredibly fast propagation of SARS -highly contagious form of pneumonia- figure prominently in discussions on the emerging new security threats (Albert 2001: 791). There is a paucity of the literature, which could establish linkages.

The most tragic examples of virus infections that have caused the deaths of many millions of people in the past century were the influenza and AIDS pandemics. Add to this the recent out break of Swine flu and the Anthrax attacks after 9/11 in the US and multiply it with the SARS outbreak of 2003 in China makes pandemics much more deadly and lethal defying the speculations of the most intelligent souls on the globe. It penetrates the national borders with absolute immunity and zero resistance. A complex mix of social, technological and ecological changes, and the ability of certain viruses to adapt rapidly to a changing environment, seems to be at the basis of this phenomenon. The lack of effective multilateral mechanism and lack of information sharing among the states further complicates the problem. This attitude can be attributed to the scant attention, which the discourse on pandemics has received within the dominant narratives on the international relations.

Conclusion

The focus and scope of security studies has evolved significantly over the years. During the pre-Cold War years several scholars advocated a relatively broad understanding of security. At this stage the field of security studies was not yet as preoccupied with deterrence and nuclear weaponry as it would become during the Cold War era. In the Cold War period the concept of security became more narrowly defined, primarily at the nation-state level and almost exclusively through the military prism. The concepts

proposed in the pre-Cold War years have been neglected by the vast majority of scholars since the Cold War, despite the historical continuities in scholarly attempts to broaden the scope of security studies. The dominant concept of security during the Cold War was intimately linked to realist theory, which focuses on states' behavior in ensuring security by military means. This concept equated security with military issues and the state-centered use of force. The conventional concept of security has been increasingly challenged on a number of issues. Some scholars criticized the almost exclusive focus on military threat in realist thinking about security, stressing the need for incorporating a range of neglected issues into the concept of security. Others challenged the state-centric focus of the concept, opting for a more multi-level analysis of security. Some academics also rejected the ethnocentricity of traditional approaches to and definitions of security, arguing that these approaches should be seen in their specific cultural context: the highly industrialized and modernized democracies of the West. Feminist critiques of security studies challenge the masculinity modes of domination underlying the concept of security, claiming that security serves patriarchal relations of power and therefore renders women insecure. Recent studies also emphasize the framing of certain issues as a security problem. In this view, there are no security threats in themselves, but only issues constructed as such by certain actors through speech acts and through the specific practices of security professionals.

Chapter Three

Pandemics in the World history

This chapter focuses on the history of pandemics. It traces the origin of several pandemics that have wreaked havoc through history. The main aim is to highlight the disaster-ridden legacy of the pandemics, with the purpose of highlighting the threats they pose to the stability and security of the international system. The chapter is divided into three parts. The first part focuses on the definition of the pandemics; different perspectives have been taken into account. The second part, thereof, provides an overview of the pandemics as they have occurred in history. The economic and military costs of pandemics are also outlined. The conclusion sums up the observations.

Definition

The word pandemic is derived from Greek word ‘pan’ meaning ‘all’ and ‘demos’ meaning ‘people’ (Merriam-Webster, Online Dictionary). It is an epidemic of infectious disease that spreads through human populations across a large region; for instance a continent, or even worldwide. Epidemics and pandemics refer to the spread of infectious diseases among a population. The difference between an epidemic and a pandemic is two-fold. First a pandemic is normally used to indicate a far higher number of people affected than an epidemic, and a pandemic refers to a much larger region affected. In the most extreme case, the global population is affected by a pandemic (Oxford Online Dictionary).

Thus an epidemic is defined by an illness or health-related issue that is showing up in more cases than would be normally expected, however, in the case of a pandemic, even more of the population is affected than in an epidemic. An epidemic is not worldwide. According to the World Health Organization (WHO), a pandemic can start when three conditions have been met: emergence of a disease new to a population; agents infecting humans, causing serious illness; and agents spread easily and sustainably among humans (WHO: 2009, Online: Web). A disease or condition is not a pandemic merely because it is widespread or kills many people; it must also be infectious. For instance,

cancer is responsible for many deaths but is not considered a pandemic because the disease is not infectious or contagious.

In short, a pandemic is used to describe a disease that is epidemic throughout the world at more or less the same time, the other criterion for defining a pandemic relates to the causative virus. A pandemic occurs when a completely new virus emerges. Further, flu pandemics exclude influenza, unless the flu of the season is a pandemic (Douglas Fleming, 2005: 1066).

Stages

The World Health Organization (WHO) has produced a six-stage classification that describes the process by which a novel virus (Influenza) moves from the first few infections in humans through to a pandemic. This starts with the virus mostly infecting animals, with a few cases where animals infect people, then moves through the stage where the virus begins to spread directly between people, and ends with a pandemic when infections from the new virus have spread worldwide. The six phase classification is reproduced here:

- No viruses circulating among animals have been reported to cause infections in humans.
- An animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat.
- An animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.
- This phase is characterised by verified human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause “community-level outbreaks.” The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic.
- This involves human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration

of phase five is a strong signal that a pandemic is imminent and that the time to finalise the organisation, communication, and implementation of the planned mitigation measures is short.

- The pandemic phase is characterised by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in phase five. Designation of this phase will indicate that a global pandemic is under way.

In planning for a possible influenza pandemic the WHO published a document on pandemic preparedness guidance in 1999, revised in 2005 and during the 2009 outbreak, defining phases and appropriate actions for each phase. This aide memoire was entitled 'WHO pandemic phase descriptions and main actions by phase.' All versions of his document refer to influenza. The phases are defined by the spread of the disease; virulence and mortality are not mentioned in the current WHO definition, although these factors have previously been included (WHO: 2009).

Pandemics and Epidemics through History

There have been a number of significant pandemics recorded in human history, generally which came about with domestication of animals, such as influenza and tuberculosis. There have been a number of particularly significant epidemics that deserve a mention out here:

Plague of Athens

Plague of Athens, 430 BC, Typhoid fever killed a quarter of the Athenian troops, and a quarter of the population over four years. This disease fatally weakened the dominance of Athens, but the sheer virulence of the disease prevented its wider spread; i.e. it killed off its hosts at a rate faster than they could spread it. The exact cause of the plague was unknown for many years. In January 2006, researchers from the University of Athens analysed teeth recovered from a mass grave underneath the city, and confirmed the presence of bacteria responsible for typhoid (Scientific American: 2006).

Plague of Justinian

Plague of Justinian, from 541 to 750, was the first recorded outbreak of the bubonic plague. It started in Egypt, and reached Constantinople the following spring, killing, according to the Byzantine chronicler Procopius, 10,000 a day at its height, and perhaps 40% of the city's inhabitants. The plague went on to eliminate a quarter to a half of the human population as it struck throughout the known world. It caused Europe's population to drop by around 50% between 550 and 700 (National Geographic, Retrieved Online).

Black Death

Black Death started in 1300s. The total number of deaths worldwide is estimated at 75 million people (Archaeology at the Museum of London, Retrieved Online). Eight hundred years after the last outbreak, the plague returned to Europe. Starting in Asia, the disease reached Mediterranean and western Europe in 1348 (possibly from Italian merchants fleeing fighting in the Crimea), and killed an estimated 20 to 30 million Europeans in six years; a third of the total population, and up to a half in the worst-affected urban areas. It was the first of a cycle of European plague epidemics that continued until the 18th century. During this period, more than 100 plague epidemics swept across Europe. In England, for example, epidemics would continue in two to five-year cycles from 1361 to 1480. By the 1370s, England's population was reduced by 50%. The Great Plague of London of 1665–66 was the last major outbreak of the plague in England. The disease killed approximately 100,000 people, 20% of London's population (The Harvard University Library, Retrieved Online).

Third Pandemic, started in China in the middle of the 19th century, spreading plague to all inhabited continents and killing 10 million people in India alone. During this pandemic, the United States saw its first case of plague in 1900 in San Francisco. Today, isolated cases of plague are still found in the western United States (WHO, Online Web).

Cholera

First cholera pandemic (1816-1826), previously restricted to the Indian subcontinent, began in Bengal, and then spread across India by 1820. About 10,000 British troops and countless Indians died during this pandemic. It extended as far as China, Indonesia where more than 100,000 people succumbed on the island of Java alone and the Caspian Sea before receding. Deaths in India between 1817 and 1860 are estimated to have exceeded 15 million persons. Another 23 million died between 1865 and 1917. Russian deaths during a similar period exceeded 2 million (Beardslee, 2000:01). Since its first outbreak millions of people have been killed by this disease. Presently, the scenario is such that the disease is under control due to rapid advances in the medical sciences that were witnessed over the century.

Influenza

Influenza, commonly referred to as the flu, is an infectious disease caused by the influenza viruses that affects birds and mammals. Although it is often confused with other influenza-like illnesses, especially the common cold, influenza is a much more severe disease than the common cold and is caused by a different type of virus. Influenza too had its part in the havoc ridden history. The following Influenza pandemics are notable in the history;

- The Greek physician Hippocrates, regarded as the 'Father of Medicine', first described influenza in 412 BC.
- The first influenza pandemic was recorded in 1580 and since then influenza pandemics occurred every 10 to 30 years.
- The Asiatic Flu, 1889–1890, was first reported in May 1889 in Bukhara, Uzbekistan. By October, it had reached Tomsk and the Caucasus. It rapidly spread west and hit North America in December 1889, South America in February–April 1890, India in February–March 1890, and Australia in March–April 1890. It was purportedly caused by the H2N8 type of flu virus. It had a very high attack and mortality rate. About 1 million people died in this pandemic.
- The Spanish flu, (1918–1919), was the largest in recent history, causing 20

million deaths worldwide. In more modern times since 1957 and 1968 influenza pandemic also killed a million people. It was first identified early in March 1918 amongst US troops training at Camp Funston, Kansas. By October 1918, it had spread to become a worldwide pandemic on all continents, and eventually infected about one-third of the world's population (or ~ 500 million persons). Unusually deadly and virulent, it ended nearly as quickly as it began, vanishing completely within 18 months. In six months, some 50 million were dead; some estimates put the total of those killed worldwide at over twice that number. About 17 million died in India, 675,000 in the United States and 200,000 in the UK. The virus was recently reconstructed by scientists at the Centre for Diseases Control studying remains preserved by the Alaskan permafrost. They identified it as a type of H1N1 virus. The 1918 Spanish influenza was one of the deadliest pandemics in human history, and researchers till don't know why that particulars train as such an effective killer (CDC, Online Web). A new study suggests that flu patients' immune systems played a surprising role. Rather than striking out against just the flu virus, victims' immune systems may have launched furious attacks that devastated their lungs (WHO, Online Web).

- The Asian Flu, (1957–58), an H2N2 virus caused about 70,000 deaths in the United States. First identified in China in late February 1957, the Asian flu spread to the United States by June 1957. It caused about 2 million deaths globally.
- The Hong Kong Flu, 1968–69. An H3N2 caused about 34,000 deaths in the United States. This virus was first detected in Hong Kong in early 1968, and spread to the United States later that year. This pandemic of 1968 and 1969 killed approximately one million people worldwide. Influenza A (H3N2) viruses still circulate today (WHO, Online Web).

Typhus

Typhus is sometimes called "camp fever" because of its pattern of flaring up in times of strife. (It is also known as 'goal fever' and 'ship fever', for its habits of spreading wildly in cramped quarters, such as jails and ships). Emerging during the 'Crusades', it had its first impact in Europe in 1489, in Spain. During fighting between the Christian Spaniards

and the Muslims in Granada, the Spanish lost 3,000 to war casualties, and 20,000 to typhus. In 1528, the French lost 18,000 troops in Italy, and lost supremacy in Italy to the Spanish. In 1542, 30,000 soldiers died of typhus while fighting the Ottomans in the Balkans (Joseph Conlon, Retrieved Online).

During the Thirty Years' War (1618–1648), about 8 million Germans were wiped out by bubonic plague and typhus fever. The disease also played a major role in the destruction of Napoleon's Grande Armée in Russia in 1812. Felix Markham thinks that 450,000 soldiers crossed the Neman on 25 June 1812, of whom less than 40,000 recrossed in anything like a recognizable military formation. In early 1813 Napoleon raised a new army of 500,000 to replace his Russian losses. In the campaign of that year over 219,000 of Napoleon's soldiers were to die of typhus. Typhus played a major factor in the Irish Potato Famine. During the World War I, typhus epidemics have killed over 150,000 in Serbia. There were about 25 million infections and 3 million deaths from epidemic typhus in Russia from 1918 to 1922. Typhus also killed numerous prisoners in the Nazi concentration camps and Soviet prisoner of war camps during World War II. More than 3.5 million Soviet prisoners of war died in the Nazi custody out of 5.7 million (Joseph Conlon: Retrieved Online).

Small Pox

Smallpox is a highly contagious disease caused by the Variola virus. The disease killed an estimated 400,000 Europeans per year during the closing years of the 18th century. During the 20th century, it is estimated that smallpox was responsible for 300–500 million deaths (De Cock KM, 2001:09). As recently as early 1950s an estimated 50 million cases of smallpox occurred in the world each year. After successful vaccination campaigns throughout the 19th and 20th centuries, the WHO certified the eradication of smallpox in December 1979. To this day, smallpox is the only human infectious disease to have been completely eradicated (De Cock KM, 2001: 09).

Measles

Historically, measles was prevalent throughout the world, as it is highly contagious.

According to the National Immunisation Program (USA), 90% of people were infected with measles by age fifteen. Before the vaccine was introduced in 1963, there were an estimated 3-4 million cases in the U.S. each year. In roughly the last 150 years, measles has been estimated to have killed about 200 million people worldwide. In 2000 alone, measles killed some 777,000 worldwide. There were some 40 million cases of measles globally that year (Stien C.E. et al, 2000: 08-14).

Tuberculosis

One-third of the world's current population has been infected with *Mycobacterium tuberculosis* (TB), and new infections occur at a rate of one per second. About one in ten of these latent infections will eventually progress to active disease, which, if left untreated, kills more than half of its victims. Annually, 8 million people become ill with tuberculosis, and 2 million people die from the disease worldwide. In the 19th century, tuberculosis killed an estimated one-quarter of the adult population of Europe; and by 1918 one in six deaths in France were still caused by TB. By the late 19th century, 70 to 90% of the urban populations of Europe and North America were infected with *Mycobacterium tuberculosis*, and about 40% of working-class deaths in cities were from TB. During the 20th century, tuberculosis killed approximately 100 million people. TB is still one of the most important health problems in the developing world (Rook, 2005: 668).

Malaria

Malaria is widespread in tropical and subtropical regions, including parts of the Americas, Asia, and Africa. Each year, there are approximately 350–500 million cases of malaria. Drug resistance poses a growing problem in the treatment of malaria in the 21st century, since resistance is now common against all classes of antimalarial drugs, except for the artemisinin (J. Clin, 2004: 113).

Malaria was once common in most of Europe and North America, where it is now for all purposes non-existent. Malaria may have contributed to the decline of the Roman Empire (j.Clin, 2004:113). The disease became known as 'Roman fever'. Plasmodium

falciparum became a real threat to 'colonists' and indigenous people alike when it was introduced into the Americas along with the slave trade. Malaria devastated the Jamestown colony and regularly ravaged the South and Midwest. By 1830 it had reached the Pacific Northwest. During the American Civil War, there were over 1.2 million cases of malaria among soldiers of both sides. The southern U.S. continued to be afflicted with millions of cases of malaria into the 1930s (WHO).

Current Pandemics

Three types of pandemics are notable during current times:

HIV and AIDS

HIV went directly from Africa to Haiti, then spread to the United States and much of the rest of the world beginning around 1969 (Los Angeles: 2007). HIV, the virus that causes AIDS, is currently a pandemic, with infection rates as high as 25% in southern and eastern Africa. In 2006 the HIV prevalence rate among pregnant women in South Africa was 29.1%. Effective education about safer sexual practices and blood borne infection precautions training have helped to slow down infection rates in several African countries sponsoring national education programs. Infection rates are rising again in Asia and the Americas. AIDS could kill 31 million people in India and 18 million in China by 2025, according to projections by U.N. population researchers (reference). AIDS death toll in Africa may reach 90-100 million by 2025 (Washington Post: 2006). With 57 million humans dead and dying from the disease its origin is still unexplained.

Influenza A/H1N1

The 2009 outbreak of a new strain of Influenza A virus subtype H1N1 (Swine Flu), created concerns that a new pandemic was occurring. In the latter half of April, 2009, the World Health Organization's pandemic alert level was sequentially increased from three to five until the announcement on 11 June 2009 that the pandemic level had been raised to its highest level, level six. This was the first pandemic on this level since 1968. Dr Margaret Chan, Director-General of the World Health Organization (WHO), gave a

statement on 11 June 2009 confirming that the H1N1 strain was indeed a pandemic, having nearly 30,000 confirmed cases worldwide (BBC News: 11 June, 2009)

Severe Acute respiratory Syndrome (SARS)

In 2003, there were concerns that Severe Acute Respiratory Syndrome (SARS), a new and highly contagious form of atypical pneumonia, might become pandemic. Rapid action by national and international health authorities such as the World Health Organisation helped to slow transmission and eventually broke the chain of transmission. That ended the localised epidemics before they could become a pandemic. However, the disease has not been eradicated. It could re-emerge. This warrants monitoring and reporting of suspicious cases of atypical pneumonia.

Unknown Diseases

There are also a number of unknown diseases that were extremely serious but have now vanished, so the causes of these diseases cannot be established. The cause of English Sweat in 16th-century England, which struck people down in an instant and was more greatly feared than even the bubonic plague, is still unknown.

Concerns about possible future pandemics

Given the historical experiences of the mankind concerns are raised about the possibility of some prevalent diseases taking the form of pandemics. In addition the medical world fears that increased resistance to drugs against several varieties of the infections may pose difficult and serious problems for the health workers in the decades to come. These may be underlined as:

Viral Hemorrhagic Fevers

Some Viral Hemorrhagic Fever causing agents like Lassa fever, Rift Valley fever, Marburg virus, Ebola virus and Bolivian hemorrhagic fever are highly contagious and deadly diseases, with the theoretical potential to become pandemics. Their ability to

spread efficiently enough to cause a pandemic is limited, however, as transmission of these viruses requires close contact with the infected vector, and the vector only has a short time before death or serious illness. Furthermore, the short time between a vector becoming infectious and the onset of symptoms allows medical professionals to quickly quarantine vectors, and prevent them from carrying the pathogen elsewhere. Genetic mutations could occur, which could elevate their potential for causing widespread harm; thus close observation by contagious disease specialists is merited (The Medical News: Online Web).

Antibiotic Resistance

Antibiotic-resistant microorganisms, sometimes referred to as ‘super bugs’, may contribute to the re-emergence of diseases which are currently well-controlled. For example, cases of tuberculosis that are resistant to traditionally effective treatments remain a cause of great concern to health professionals. Every year, nearly half a million new cases of multidrug-resistant tuberculosis (MDR-TB) are estimated to occur worldwide. After India, China has the highest rate of multidrug-resistant TB. The World Health Organization (WHO) reports that approximately 50 million people worldwide are infected with MDR TB, with 79 percent of those cases resistant to three or more antibiotics. In 2005, 124 cases of MDR TB were reported in the United States. Extensively drug-resistant tuberculosis (XDR TB) was identified in Africa in 2006, and subsequently discovered to exist in 49 countries, including the United States. About 40,000 new cases of XDR-TB emerge every year, the WHO estimates (WHO, Online Web).

Antibiotic-resistant organisms have become an important cause of health care-associated (nosocomial) infections (HAI). In addition, infections caused by community-acquired strains of methicillin-resistant *Staphylococcus aureus* (MRSA) in otherwise healthy individuals have become more frequent in recent years. Inappropriate antibiotic treatment and overuse of antibiotics have been an element in the emergence of resistant bacteria. The problem is further exacerbated by self-prescribing of antibiotics by individuals without the guidelines of a qualified clinician and the non-therapeutic use of

antibiotics as growth promoters in agriculture.

Influenza

Wild aquatic birds are the natural hosts for a range of influenza virus. Occasionally, viruses are transmitted from these species to other species, and may then cause outbreaks in domestic poultry or, rarely, in humans.

Avian Flu (H5N1)

In February 2004, avian influenza virus was detected in birds in Vietnam, increasing fears of the emergence of new variant strains. It is feared that if the avian influenza virus combines with a human influenza virus (in a bird or a human), the new subtype created could be both highly contagious and highly lethal in humans. Such a subtype could cause a global influenza pandemic, similar to the Spanish Flu, or the lower mortality pandemics such as the Asian Flu and the Hong Kong Flu.

From October 2004 to February 2005, some 3,700 test kits of the 1957 Asian Flu virus were accidentally spread around the world from a lab in the US (MacKenzie, 2005: Retrieved Online). In May 2005, scientists urgently call nations to prepare for a global influenza pandemic that could strike as much as 20% of the world's population. In October 2005, cases of the avian flu (the deadly strain H5N1) were identified in Turkey. European Union Health Commissioner Markos Kyprianou said: "We have received now confirmation that the virus found in Turkey is an avian flu H5N1 virus. There is a direct relationship with viruses found in Russia, Mongolia and China." Cases of bird flu were also identified shortly thereafter in Romania, and then Greece. Possible cases of the virus have also been found in Croatia, Bulgaria and the United Kingdom (BBC NEWS, 17 October 2005).

Avian flu cannot yet be categorised as a "pandemic", because the virus cannot yet cause sustained and efficient human-to-human transmission. Cases so far are recognised to have been transmitted from bird to human, but as of December 2006 there have been very few (if any) cases of proven human-to-human transmission. Regular influenza viruses establish infection by attaching to receptors in the throat and lungs, but the avian

influenza virus can only attach to receptors located deep in the lungs of humans, requiring close, prolonged contact with infected patients, and thus limiting person-to-person transmission.

Biological Warfare

The pathogens modified or in their natural form, have been used since earlier times as weapons to fight adversaries. Biological warfare has been practiced repeatedly throughout history. Before the 20th century, the use of biological agents took three major forms; deliberate poisoning of food and water, use of micro organisms, toxins or animal, living or dead in weapon systems, and use of biologically inoculated fabrics.

Biological warfare (BW), also known as germ warfare, is the use of pathogens such as viruses, bacteria, other disease-causing biological agents, or the toxins produced by them as weapons hence, bio-weapons). There is a clear overlap between biological warfare and chemical warfare, as the use of toxins produced by living organisms is considered under the provisions of both the Biological and Toxin Weapons Convention and the Chemical Weapons Convention. Toxins, which are of organic origin, are often called 'midspectrum agents.'

A biological weapon may be intended to kill, incapacitate, or seriously impair a person, group of people, or even an entire population. It may also be defined as the material or defense against such employment. Biological warfare as a military technique can be used by nation-states or non-national groups. In the latter case, or if a nation-state uses it clandestinely, it may also be considered as bioterrorism.

The threat of dual-use of biological technology aggravates the problem of preventing the misuse of the technology for the purpose of developing biological weapon systems. The agents can be modified to create virulent strains of bacteria and viruses that can wreck havoc to humanity. Ideal characteristics of biological weapons targeting humans are high infectivity, high potency, non-availability of vaccines, and delivery as an aerosol. Biological warfare can also specifically target plants to destroy crops or defoliate vegetation. The United States and Britain discovered plant growth regulators (i.e. herbicides) during the Second World War, and initiated an herbicidal warfare program that was eventually used in Malaya and Vietnam in counter insurgency. We

witnessed Anthrax attacks in the United States shortly after the September 11 attacks on the twin towers.

Conclusion

Viral pandemics are not unusual, Pandemics are a regular feature of life on earth, and they occur with surprising regularity throughout world history. Wherever there are masses of people, there are opportunities for viruses to spread. It is especially important to note that even with all of today's advanced medical technology, swine flu virus eluded the entire world's infectious disease authorities, spreading to more than seven different countries before it even appeared on the CDC's (Centre for Diseases Control) radar. No wonder the frequency and severity of the pandemics has undergone significant shifts, but still the threats loom large. A pandemic not only affects the demographic features of a particular region or the globe as a whole, it has detrimental effects on the economy and societal considerations of the governments. Huge funds have to be diverted from civic works to tackle the spread of pandemics.

The economic impacts of the spread of infectious diseases would also be huge. The recent experience with SARS provides some insight into the potential economic impact. The outbreak of SARS in 2003 showed that even a disease with a relatively small health impact can have a major economic effect. Globally, SARS is believed to have infected around 8,000 people, killing 800 (Cooper and Coxe 2005). The Asian Development Bank estimated that the economic impact of SARS was around \$18 billion in East Asia, around 0.6% of gross domestic product (Fan, Asian Development Bank 2003). The psychological impact of a pandemic outbreak is severe. The main impact of SARS was on the demand side, as consumption and the demand for services contracted (Fan, 2003). This reflects the psychological impact of the outbreak. However, a flu pandemic would also impact the supply side, as members of the labor force get sick and in some cases, die. Human and physical capital may also be destroyed, reducing the long-run economic growth potential.

Besides economic impacts, pandemics may also have severe effects on the military forces which can in turn have an adverse effect on the security of a particular country. President Jakaya Kikwete (Tanzania) warned recently that, "With high infection rates among many military forces in Africa, HIV/Aids could pose a security concern in

the continent.” He said that death from HIV/Aids or any other cause results in the loss of personnel which affects military preparedness and increase the cost of recruitment and training of replacements." The implications for national security are clear; a military force that is sick and dying will not be as effective - or as dedicated - as one that is healthy," he told over 200 military personnel from about seventy countries. The International Crisis Group, a think tank body on strategic global affairs, warned recently that even a perception that the military of an adversary was suffering from an HIV/Aids epidemic, might trigger or increase the likelihood of wars. And according to the United States' Central Intelligence Agency (CIA), infant mortality levels which have been on the increase because of the disease could be one of the variables in predicting state failure (All Africa. com: Retrieved Online).

The presence of pandemic would not only limit state capabilities to impose socio-political order, but would also jeopardise the state capabilities to fend off external aggression. Through the debilitation of the military personnel the pandemic can degrade human resources and reduce troop strength. By reducing the number of troops available for combat and support, Pandemic can also affect any future military operation an even war outcomes (Cooper and Kirtin, 2009: 144). In her testimony before the US Senate Committee on Foreign Relations, Lauri Garret (2005) asked this question, “if a nation is fighting wars on two fronts involving more than 200,000 troops and H15N1 turns out to mirror the 1918 flu in that it takes a highest toll among the adults, how can armies continue to carry out their operations? If in addition their enemies carry out suicide bombings, and therefore cares not whether it is infected with a deadly virus, how might the pandemic affect the course of war? (Quoted in Cooper and Kirtin, 2009: 144).The 1918 Spanish influenza provides the most vivid example of how a pandemic can affect the course and outcome of a war. It forced British troops to postpone their attack on La Becque and made it harder for the German troops to advance and harder to retreat (Crosby in Cooper and Kirtin, 2009: 144). In addition the pandemics have the capability of affecting the regional stability, government and international response to pandemic can be politicised in terms of imposing restrictions on trade between countries, and can have potential impacts on the balance of power (ibid,145).

The study of the role of public health and international relations has its origin in

the study of Plague of Athens by Thucydides, wherein he observed the withering effect of contagion upon the governance of Athenian city-states. Historians including Mc Neill (1977) and Alfred Corsby (1986), continued this discourse noting the effect of pandemics on the course of history and the fate of the states (ibid, 25). The field of health security obtained prominence in the year 2000, as the US National Intelligence Council issued its National Intelligence estimates on the threat that infectious diseases posed to the US material interests. The inexorable spread of the HIV/AIDS in the 1990's resulted in the epidemic being designated as the greatest threat to the Global Security by the United Nations Security Council in 2000. In the post September 11 scenario there has been a surge in the scholarly work in the field of health and international affairs. Thus, realism wants that states protect the health of their citizens in order to build itself strong in the international arena of power hungry nations states (ibid, 25).

To conclude one can say that the threat of pandemics has the potential to set in motion a series of events which could result in slow economic growth, endanger societal stability, hurt political legitimacy, and compromise military readiness. The immediate impact of pandemics on economy, society, polity and military can be felt within a country or across countries. The impacts can be short term or long term.

Chapter Four

Responses at the Global level

The focus of this chapter is on the responses evolved over the years to tackle the threats emanating from the spread of infectious diseases. For this purpose the chapter is divided in two parts; the first part deals with the theoretical responses mainly in the realm of international relations and international security studies. The second part deals with the policy responses at the global level. The aim is to highlight the level of seriousness with which the world community is taking the threats emanating from pandemics. The conclusion focuses on the economic, societal and military costs of the spread of infectious diseases.

Theoretical Responses

The evolution of the study of security from a narrowly defined state-military-war focus to a broader, more inclusive definition finds its origins even before the end of the Cold War. Beginning in the early 1980s, there were writings that examined the narrow dimensions of security and questioned the exclusivity of the military within the concept of security. At the heart of its critique, this literature questioned the simplicity of the military-security relationship. Prior to this, security studies were more familiarly recognised as strategic studies. Primarily concerned with ideas such as Mutually Assured Destruction, deterrence, response capabilities as well as specific types of military weaponry and troop deployments, strategic studies very much took the concept of security as its own. Security exclusively meant preventing external military threats. While the initial concepts of Human Security and individual rights previously existed, these concepts were found in the larger, International Relations literature; not in security studies.

The origins of the concept and term 'human security' can be traced back to W.E. Blatz's *Human Security: some reflections* (University of Toronto, 1966). However, two pieces of literature are frequently cited as the genesis of security studies placed in a context outside of a military-interstate war concern. Richard Ullman's *Redefining*

Security and, in particular, Barry Buzan's *People, States & Fear: The National Security Problem in International Relations* lead the way to take the concept away from strategic studies. Ullman sought to broaden the number of security threats that should be acknowledged by the state. Ullman did not negate the military threats altogether, but he was of the opinion that along side military threats there existed threats that could inflict much damage on the state as much can be inflicted by a nuclear weapon (Ullman, 1983: 129). Ullman sought to broaden the number of security threats that should be acknowledged by the state. Environmental threats such as flooding, earthquakes or epidemics can, according to Ullman, threaten state security (Ibid, 129). Further, "while a full-scale nuclear exchange would undoubtedly threaten the existence of humans, the unpredictability and devastating consequences of certain non-military threats force the state to take action, and at the very least acknowledge the severity of these alternative security threats. Ullman did not order these threats; rather, he argues that lack of theoretical and policy attention given to non-military threats may in fact be the largest threat" (Ricci, ISA Conference Report, 2007: 02). Ullman further argues that by focusing exclusively on the military, the state limits its options in combating other threats. "Whether in the form of a hurricane, famine or an asteroid, these alternative threats, all varying in probability of occurrence, must be acknowledged as threats by and to the state, and depending on the potential of an 'attack,' need to be actively confronted by the state" (Ullman, 1983: 130). Failure to grasp this choice, as articulated by Ullman, leaves the state vulnerable to a host of security threats, including pandemics.

Buzan sees non-military threats as essential in understanding the concept of security in totality. According to Buzan, to simply confine security a study to military threats not only prevents a full and complete analysis and assessment of a range of threats, but incorrectly assumes that security can simply be removed and independently examined (Buzan, 1983: 248). Buzan's insight into the role of the state in security matters proves invaluable to understanding the threat of infectious diseases like influenza (Ricci, 2007: 03). He argues that state and international security threats cannot be separated. Similarly, influenza cannot be defended by states individually, as no state has enough resources to tackle this threat independently (Ricci, 2007: 05). Buzan draws out the point that while the military offers protection against some bodily threats, it cannot protect

against all threats an individual may incur over his/her lifetime. Threats to the individual can even arise from the state, which was originally formulated to protect individuals from threats to their existence.

As mentioned previously, one of the central tenets of Buzan work is that non-military threats are critical to fully understanding security studies. He lists four types of threat confronting the state: military, economic, political and ecological (Buzan, 1983: 75). He even specifically mentions the threat arising from plagues. He favoured a cooperative engagement of the states in international system to tackle the security threats which are common to them. Thus, according to Buzan, “national security policy therefore must, if it is to be rational, belie its name and contain a strong international dimension” (Buzan, 1983: 150). There is a clear connection between the theoretical concepts and practical solutions to policy problems; policy is very much at the centre of the security debate. He views the work on the subject of security, not as aimed to find solutions to particular policy problems, “but to alter, and hopefully to expand and enrich, the background of ideas against which particular policy problems are viewed” (Ricci, 2007: 07). Similarly, while Buzan makes few passing references to infectious diseases, the framework he develops provides an excellent point of departure to examine the security threat of infectious diseases. Just as Buzan argues that state and international security cannot be separated, influenza prevention too cannot be tackled by individual states acting separately. Only through cooperation and interaction by states can the threat of a pandemic be prevented, or at a minimum reduce the negative consequences. Further, “the logic of national security is seen to lead irresistibly in the direction of international security, so much so that the two cannot be separated in relation to achievement of security as a policy objective” (Buzan, 1983: 257). The threat of pandemics highlights the central role the state plays in providing security as no alternative security structure or system currently exist to engage and defend against a threat of this magnitude. States, though, do not have the ability under any circumstances to tackle security threats, like pandemics individually.

Stanley Hoffman in his analysis; *Hedley Bull and his contributions to international relations* (1986), argues that while states may be independent political entities, shared common interests and values positively link states together (Stanley,

1986: 185). Bull's influential *The Anarchical Society: The Study of Order in World Politics* provides an excellent point of departure to examine how and when states interact as he saw that material factors were not the only reason for state interaction. He saw the emergence of a society of states as "a group of states, conscious of certain common interests and common values, form a society in the sense that they conceive themselves to be bound by a common set of rules in their relations with one another, and share in the working of common institutions" (Bull, 1977: 13). Shared common ground formed the foundation for Bull's international society. An influenza pandemic, for example, very much fits this common interest as a pandemic is feared by states, and an inability to follow through with international health and security agreements on pandemic influenza could threaten both the independence and sovereignty of states. This common understanding of the influenza threat, though, draws states to cooperate. As pandemic influenza demonstrates, argues Ricci, states may interact to tackle complex security threats that exceed an individual state's ability to confront. Threats like influenza drive states to recognize that other states or international society can collectively provide more effective security than a single state acting alone, regardless of the state's relative or absolute strength (Ricci, 2007: 11). The changing context of security studies appears to have brought an increased opportunity to address global problems—among them, ethnic strife, the management of weapons of mass destruction, environmental and population problems, illegal narcotics, and HIV/AIDS—at the international level, within a wider conception of peace and security (Newman, 2002: 03).

Constructivism

Constructivism sheds light on as to why states engage themselves on issues of common interest, especially when confronted with the security threats such as those emanating from pandemics. As Ricci argues; HIV/AIDS is understood by the United States in a social context; HIV/AIDS is not viewed simply as a threat seeking to alter power relationships between states. Rather, the HIV/AIDS threat takes the form of international and domestic norms, identities, interests, rules, and power (Ricci, 2007: 11). Newman Edward argues that while an influenza pandemic will most likely occur, states perception

and reaction to that threat, as opposed to a pure material explanation, is neither natural nor inevitable (Edward, 2001: 248). Edward further argues that a material response to 1976 'Swine Flu Incident,' actually decreased the security of the United States (Edward, 2001: 248). Constructivism is especially concerned with "portraying individual and state security as social constructs susceptible to limitless reformulation over time by willing and willful actors rather than as a static concept fixed to definable and unchangeable condition" (Kolodziej, 2005: 260). This approach allows constructivism the flexibility to confront threats like pandemics, as it recognizes that threats as well as threat perception change over time; the threat of today, may not be the threat of tomorrow. Thus, constructivism can adapt to social realities as they unfold. Bull's work on anarchy and order has not touched the subject at all, but the underlying theme of all the approaches mentioned over here recognise non-military threats as distinct realities and acknowledge the need to move beyond the strict and dangerous confines of traditional national security policies. Security from pandemics requires state cooperation and engagement is what all three of these theoretical approaches share in common. Without such cooperation the states in international system would find themselves at cross roads. The threat of pandemics is now largely regarded as looming large over political and economic stability as is evident by public acknowledgment by the United States that disease threatens its national security (Barton, 2000: 01). Domestic pressure is deemed by as being a necessary condition in forcing the states towards achieving this cooperation. Domestic pressure does provide some insight into state and foreign policy making decisions.

Realism

At a first glance it would seem that realism does not factor the spread of infectious diseases as an intellectual concern within international relations. Though, we do not find much explicit references to infectious diseases in realism, but one could argue that realists would need to pay attention to pandemics once they are included in the power calculations of the states. David P. Fidler argues that on account of the fact that pandemics may incur huge economic and military losses, and thus they have the capacity to undermine power of a particular state (Fidler, 1997: 38). He favours globalisation of

public health to mitigate the effects of the deadly infections. Despite the claims by Fidler we do not find any explicit references or for that matter theorisation of pandemics as a security threat as for different strands of realism are concerned. The realist attention on internationalisation however would be much focused to ensure real convergence of national interests. Such focused internationalisation would not be sufficient to protect the states from the spread of diseases from other countries, “but realists rarely shrink from the conclusion that foreign policy in an anarchical international system always leaves states vulnerable to a myriad of threats” (Fidler, 1997: 47). The challenge of infectious diseases is, however, forcing states to look to international cooperation rather than to unilateral action. Proposals to embark upon a programme of public health internationalisation, at the same time would not impress a realist, who remains skeptical about the prospects for international cooperation in international relations. Here, realism poses a serious challenge to the plans for internationalisation of infectious diseases because the failure of past international efforts on other issues resonates with its pessimistic outlook.

An optimistic analysis of the things would demand cooperation as the “pathogenic microbes do not recognise borders or carry passports, which is one way of saying that what is critical to realism, the anarchical structure of the international system is irrelevant to the microbial world” (Fidler, 1997: 39). As a theory, then, realism is well-suited to be sensitive to the influence of non-traditional security threats such as pandemics. In analysing the contemporary international political economy, Susan Strange noted how little control states exercise over their domestic economics because of the globalisation of markets (Strange, 1995: 161). A major feature in the globalisation of markets is the power held by non-state actors, like private companies and banks. This undermining of state sovereignty over the domestic economy led Strange to argue that this development makes it “hard for international relations scholars to insist that the state is still the primary unit of analysis in international politics” (Strange, 1995: 154). The emergence of infectious disease control as a major international issue reinforces Strange's observation about the impact of globalisation on international relations theory: the structure of the international system matters less when it comes to non traditional security threats which are of common interest to all (Strange, 1995: 161).

Realism, it can be argued, is ill-suited to adjust itself to this new world. An objective analysis of strategies to tackle pandemics demands an analysis of the type of states. The success depends upon the level of development of a particular state, its resource base, advancements in public health well being. Realism seems to fail on this count as for realists states are identical and abstract units of analysis. In analysing realism in the context of ensuring state security few conclusions are valid over here. First, given its emphasis on the state and power, realism would stress national public health infrastructure improvements much more than internationalisation. The focus here would be on infectious disease control as a key element of national security. Secondly, attention would be focused on the threat of disease importation by improving surveillance and perhaps resurrecting quarantine methods. Realism would revise the calls for internationalisation of infectious diseases only to protect the state from imported infectious diseases.

Liberalism

Liberal thought traditionally has been concerned with protecting individual liberty from encroachments by the state. This focus helps explain liberalism's emphasis on individual rights, democratic government, and free market economics. Infectious disease control, and other aspects of public health, has traditionally been services provided by governments for individual and social welfare. It can be argued that liberal tradition does provide a scope for much needed international cooperation in tackling the threats of deadly infectious diseases. At the same time liberalism values international law and international organisations as mechanisms through which states can reach more tangible accommodations of conflicting interests and cooperate effectively when interests are mutually shared. The need for international cooperation as is demanded by the need to tackle pandemics is in consonance with the liberal tradition.

It is much clear that liberalism is more relevant than realism in dealing with the threat of pandemics as liberalisation supports and favours cooperation among the nations. As David Fidler argues, "liberals would argue that the combination of democracy, domestic free market economics, economic interdependence, and enlightened

internationalism among states provides the best blueprint to combat the unprecedented levels of deeply rooted social, economic, and environmental problems that provide pathogenic microbes with fertile conditions” (Fidler, 1997: 46). Thus, liberalism can be seen as providing a frame work conducive to effective multilateralism in emergency situations such as those of pandemics.

Critical Theory

Critical theory has been a recent development in international relations theory, but it has much older roots in the critical social theory of Marx, Hegel, Kant, and the Frankfurt School (Devetak, 1996: 145). Critical theory seeks not only to explain international relations but also to make resulting explanations part of a universal project of human emancipation. In this respect it seems closer to liberalism as emancipation ultimately embarks upon the project of human liberty. Fidler argues,” When applied to the pathology of the globalisation of public health, critical theory would immediately hone in on the development of unprecedented levels of deeply-rooted social, economic, and environmental problems that fuel infectious disease epidemics as well as the alleged worsening of these problems through the globalisation of markets” (Fidler, 1997: 47). It may thus help to bring attention to the social, economic, and environmental problems more and may also reinforce fears about the impact of spread of pandemics, which in the long run would help accentuate the attention to mitigate the effects.

Communitarianism

Communitarianism is a tradition of thought that is markedly distinct from individualism. While not always at odds with liberalism, Communitarianism aims to shift the focus from individuals to community, which it holds is undervalued in liberalism. Communitarianism places individuals within communities and analyses their interests with respect to their relationships with those communities (Parment, 2003: 55). Public health typically has high standing in communitarian thought because health is essential to communities. For communitarian's, Lawrence O. Gostin notes, public health “becomes a

transcendent value because a basic level of human functioning is a prerequisite for engaging in activities that are critical to communities” (Gostin, 2003: 13). Important in this conception of health and community is the idea that only collective action can secure the public health. Individuals alone are powerless to ensure acceptable levels of health – this is particularly true when confronting infectious diseases. Gostin argues that, during a public health emergency, communitarian's would insist that government act in the public good and operate under the assumption that “everyone would be better off if each person ceded a small amount of liberty to achieve a safer and more secure population” (Gostin, 2003: 13). Extrapolating the communitarian political theory to international relations would mean that it demands greater cooperation on the issues of mutual concern to the governments and, as such, favours engagement in tackling common threats such as those of pandemics.

Debate on Securitisation of pandemics

It can be said with a degree of certainty that the international relations theory in general and security studies in particular has remained oblivious to pandemics as a security threat. A variety of factors have contributed towards this partiality. At the first instance, was the conceptual challenge related to 'securitising' pandemics. Several policy makers and academics have called for a redefinition of international security to include health threats. Using the rubric of human security, advocates assert that the health of a population is of utmost importance to state stability. Redefining security to include issues of health and infectious disease is important to make the concept of security more relevant to the challenges states face in the post- Cold war era. Despite the popular support, many within the security studies community reject the notion of the changing the concept of security to include infectious diseases. They claim that doing so would dilute the meaning of security, making it a catch-all term for anything negative (Youde, 2004: 02). While not necessarily denying that infectious diseases can pose a severe burden to a state, these scholars claim that it does not pose the same existential threat to survival of state. Human security and health security issues largely remain on the margins of literature on international security.

Many proponents of the health security look to the historical record to reinforce their claims about the importance of infectious disease in impacting on the international system. Thucydides recalls how a mysterious plague felled the Athenian army, playing a decisive role in the outcome of the Peloponnesian War (Wick, 1982). The Black Plague, which killed approximately one-third of Europe's population, played a decisive role in bringing about the end of the feudal system and encouraging the Reformation (Moore 1966: 06).

Even with this attention, many remain skeptical, if not hostile, to attempts to broaden the security studies agenda. The controversy over human security and health security has spawned an impressive amount of discussion and debate. "Surprisingly, though, both sides continue to talk past each other. Neither side truly engages the other" (Ibid, youde, 08). Among those most stridently opposed to broadening the security agenda was Daniel Deudney (1990). Using the example of environmental security, Deudney argues forcefully against broadening the definition of security. Deudney argues that national security and environmental degradation are too dissimilar to fall under the same heading because of the type of threat each poses, the source and scope of the threat, the degree of intention about the threat, and the types of organizations designed to protect people from these threats (1990: 462-465). He goes on to argue that employing the rhetoric of national security for environmental problems may actually be counterproductive.

Stephen Walt also argued against broadening security studies to include issues such as "poverty, AIDS, environmental hazards, drug abuse, and the like" (Walt 1991: 213). Doing so, he argues, would "destroy the intellectual coherence and integrity of the discipline while distracting researchers and policymakers from crafting viable solutions to these problems" (ibid, 213).

Ronald Paris (2001), applauds recent efforts to narrow the concept of human security, but notes that such efforts "proceed in a haphazard fashion without explaining their rationales" (Paris, 2001: 93). He cites the ambiguity and flexibility of the definition of 'human security' as its greatest problem. Paris writes writes, "Given the hodgepodge of principles and objectives associated with the concept, it is far from clear what academics should even be studying" (Ibid, 93).

Susan Peterson, (2002), focusing specifically on the integration of infectious disease into security studies, offers one of the most far-reaching critiques. She notes that advocates of human security and national security “talk past each other at nearly every turn, stymieing any serious engagement over whether and how infectious diseases threaten security” (2002/03: 49).

In conclusion, the theoretical approaches to security highlight the differences across the approaches. The level of analysis shifts from the state to the individual as one proceeds from realism to critical theory through liberalism, constructivism and Communitarianism. More importantly, the scope of what might be considered a threat to security becomes broader. With realism identifying possible existential threats to the state security while liberal and critical security conceptualise it as issues that may infringe on individual freedoms and interests. Clearly the schools of thought formulate and prioritise threats to security differently. Though, in all the theoretical approaches analysed here we don't find explicit references to threat of pandemics, but on extrapolating the basic tenets of different approaches we can judge the amount of flexibility that each of them allows for tackling non traditional security threats. Realism, though obsessed with the military solutions to the threats to security of states, does provide some room for common action, particularly when it comes to stopping the import of infectious diseases. Liberalism is more flexible in that it gives primacy to individual as the level of analysis. Further, liberalism favours international institutions for the purpose of finding solutions to issues of common concerns, thus fostering multilateral action rather than unilateral military solutions. Communitarianism is akin to liberalism when it comes to collective action. Critical theory embarks upon a much more ambitious project of human emancipation from all threats by what ever means possible. The human security paradigm admirably encourages the field of international relations to understand that threats to the international system can come from any number of sources. This paradigm has already been dealt with in the second chapter of the study.

Policy Responses

Global health problems are often framed as common challenges confronting humanity.

Because germs know no borders, as the proverb has it, it makes sense to think in terms of a globe that is unified in epidemiological terms, and to organise responses accordingly. Infectious diseases have also become increasingly important in the agenda of state policy makers, especially among the Western and more developed countries. In the United States, for example, the national intelligence council has recently undertaken an examination of the security implications of infectious diseases, coming to the conclusion that “HIV/AIDS represents a threat to the national security of the United States” (National intelligence council Report, 2000). Recognition by policy makers of the importance of changing patterns of health and disease for international relations has taken place in response to three related developments. First, there have been direct effects on richer countries through increased travel and migration and implications for economic interests; Second, the implications of emerging and resurgent infectious disease and; Third, social movement mobilisation around global health issues has increased (Ingram, 2005: 382). This has brought certain health issues to the top of the global political agenda at G8 summits and the UN Security Council, and resulted in major new policy commitments by partner countries.

The United Nations

Assessing the level of threats emanating from pandemics mainly influenza, the United Nations system has developed a five point action plan which includes (UN, Online web):

- Healthy livestock production systems and animal health services capable of responding to highly pathogenic avian influenza,
- Functioning human public health systems (that can detect, respond to and contain serious infections, including avian and pandemic influenza),
- Social mobilisation activities that include communication for behaviour change
- Crisis preparedness efforts that include contingency planning for influenza pandemics,
- Institutional arrangements for co-coordinated financial and technical support for effective national implementation of integrated influenza programmes.

The UN as a whole contributes to work in these areas through support for seven

objectives;

- By focusing on animal health and bio-security, stressing on the need for global cooperation on safeguarding animal health and ensuring that bio-security is brought up to standard. This plan calls for early detection and prompt action in case of spread of a viral infection among the livestock.
- Ensuring that the economic and poverty impact of avian influenza as well as related control measures are monitored and rectified for purpose of limiting any adverse repercussions and seeking fair and equitable compensation for those whose livelihoods are endangered by avian influenza and control measures.
- Strengthening public health infrastructure, including surveillance systems, to reduce human exposure to a new virus, strengthen early warning systems, rapid containment operations and, finally to coordinate global science and research on aimed at mitigating the spread.
- Ensuring coordination of local, national and international stake holders which includes civil society groups, private sector actors and national governments the world over.
- Public communication and information to provide clear and unambiguous risk and outbreak information particularly to the most vulnerable amongst them.
- Ensuring the continuity of essential social, economic and governance services, and effective implementation of humanitarian relief, under pandemic conditions.
- Ensuring international help and support in case a national government is overburdened. These include among other things providing the affected state all the knowledge and know how that might be necessary in tackling a pandemic situation.

In addition, the United Nations created UN Central Fund for Influenza Action (CFIA) in November 2006 with the purpose of provide funding for urgent, unfunded and under-funded priority actions to respond to Avian Influenza and prepare for an Influenza Pandemic. The CFIA has been designed as a central financing system to enhance inter-agency coordination; respect the key UN agency responsibilities; promote a coherent, effective and predictable overall UN system response; and simplify, through one pooled account, the capacity to support the range of UN agencies engaged in specific responses

(United Nations, Online web). In the event of a pandemic, UN claims to be prepared to continue critical operations. In order to achieve this end the UN and its specialised agencies have developed contingency plans to minimise the impact of any pandemic so that the UN system can best support national preparedness and response to a pandemic.

The UN system is supporting national authorities in their pandemic planning process. As no actor alone will be able to sustain a valid response to an influenza pandemic it is important to establish functional links between governments, the UN, NGOs, private entities, civil society and the media. The simultaneous involvement of all these actors is deemed to be necessary in order to achieve success in combating any emerging infectious diseases that threatens security and stability. The UN system is establishing regional capacities to support coordination of pandemic preparedness at country level, preparation of inter-agency plans, pandemic preparedness within the UN system and coordination and information sharing with partners (NGOs, donors, private sector and regional institutions). This initiative is starting in Asia supported by different Bangkok-based regional UN offices and similar initiatives are planned for Africa (UNSIC, On line web). The office of the United Nations System Influenza Coordination (UNSIC) was created within the United Nations Development Group (UNDG) to support the different initiatives of the UN system. The UNSIC in New York, has been assigned the task of coordinating the initiatives of UN System agencies, development banks, the private sector, civil society and the donor community, in their response to avian and human pandemic influenza. The work of UNSIC is primarily focused on:

- Global reporting on progress and funding
- Inter agency coordination
- Support to inter-governmental processes
- Support to the UN system's preparedness efforts
- Coordinated UN-system support to avian and human influenza action in country by national authorities and other stakeholders
- Coordination of communications.

UN agencies working with UNSIC include the WHO, FAO and OIE. In March 2006 the UN secretary general asked all the UN offices, including UN headquarters, UN

country teams and all UN missions to complete their pandemic contingency plans by the end of 2006. After reviewing each of the submitted plans, UNSIC prepared and distributed a list summary of the best practices and strategies identified from the reports (WHO: On line web).

The UN Security Council

The Security Council met on 10 January 2000 in an open debate on "The impact of AIDS on peace and security in Africa." It was the first time that the Council had decided to discuss the issue of HIV/AIDS in the context of global security. During the debate, the Council recognized the magnitude of the AIDS pandemic in Southern and Eastern Africa and its threat to economic, social and political stability. It further recognized the economic costs and the need to mobilize more resources to combat the pandemic, and the President of the Council affirmed the need for a new agenda for global security in light of new global forces and challenges to international order. Deeply concerned by the extent of the HIV/AIDS pandemic worldwide, and by the severity of the crisis in Africa in particular, the Security Council adopted resolution 1308 (2000) at its 4172nd meeting on 17 July 2000. The Council stressed the need for coordinated efforts of all relevant United Nations organizations to address the HIV/AIDS pandemic in line with their respective mandates and to assist, wherever possible, in global efforts against the pandemic (S/2000/1308).

World Health Organisation

The WHO, headquartered in Geneva, is the United Nations specialised agency on human health. As such the WHO is the central actor for coordinating the global response to a pandemic outbreak, advising countries to develop national preparedness plans, create or strengthen surveillance systems, and coordinate national and international efforts. In 1952, WHO established the WHO Global Influenza Surveillance network to serve as a global mechanism to identify influenza viruses with pandemic potential (IFPA Focus Report, 2007: 12). This network includes four WHO Collaborating Centres located in Australia, Japan, United Kingdom, the United States and 112 National Influenza Centres

around the world (Ibid, 12). As apart of this network WHO also created Global Outbreak Alert and Response Network (GOARN) in 2000 to serve as technical collaboration clearinghouse of human and technical resources for the identification and immediate action on infectious diseases outbreak. The GOARN international team includes epidemiologists, infection control experts, and laboratory technicians from over 100 partner institutes, such as the U.S. Centers for Disease Control and Prevention (CDC), the European Programme for Intervention Epidemiology Training Network, the Institute Pasteur Network (France), the Institute for Infectious Disease Control (Sweden), the National Institute of Infectious Diseases (Japan), and other national and international agencies traveled to countries to report on avian influenza outbreaks, conduct field research, and collect data. The aim of the team is to control all the outbreaks through rapid identification, verification, and communication of threats, as well as the prompt delivery of necessary technical assistance to the outbreak site.

In 2002, the WHO developed Global Agenda on Influenza Surveillance and Control to raise public awareness over the health threat influenza. Measures adopted to increase influenza surveillance and control have included improved guidance on the use of vaccines and other preventative tools, the development of national, regional, and global pandemic preparedness plans, and the distribution of studies to enhance global understanding of the health and economic burden of influenza. The WHO hosted a training workshop on influenza surveillance and control in Tokyo in May 2004 and in Kuala Lumpur, Malaysia in April 2005. The primary objective of both workshops was to update participants on WHO influenza surveillance guide lines, share national preparedness plans, report on the status of vaccine and antiviral drug development, and discuss the establishment of National Influenza Centres in countries without influenza surveillance centers. In addition, the WHO has published multiple reports that outline the responsibilities of the WHO and national authorities during a pandemic, such as the WHO Guidelines on the Use of vaccines and Antiviral during Influenza Pandemics (2004), WHO Global Influenza Preparedness Plan (2005).

WHO previously published pandemic preparedness guidance in 1999 and a revision of that guidance in 2005. Since 2005, there have been advances in many areas of preparedness and response planning. For example, stockpiles of antiviral drugs are now a

reality and a WHO guideline has been developed to attempt to stop or delay pandemic influenza at its initial emergence. There is increased understanding of past pandemics, strengthened outbreak communications, greater insight on disease spread and approaches to control, and increasingly sophisticated statistical modeling of various aspects of influenza (WHO, Online web). WHO claims to have gained tremendous practical experience from responding to outbreaks of highly pathogenic avian influenza A (H5N1) virus infection in poultry and humans, and from conducting pandemic preparedness and response exercises in many countries. There is greater understanding that pandemic preparedness requires the involvement of not only the health sector, but the whole of society.

In 2007, the International Health Regulations (2005) or IHR(2005) entered into force providing the international community with a framework to address international public health concerns (WHO, Online Web). In light of these developments, WHO decided to update its guidance list in order to enable countries to be better prepared for the next pandemic. This Guidance serves as the core strategic document in a suite of materials. It is supported by a complement of pandemic preparedness materials and tools. The guidance document recommended several actions to be followed before, during and after pandemics (WHO, Preparedness Document, 2009: 30).

These include:

1. **Planning and coordination:** The goal of planning and coordination efforts is to provide leadership and coordination across sectors. One important aspect is to integrate pandemic preparedness into national emergency preparedness frameworks. **Situation Monitoring and assessment:** The goal of situation monitoring and assessment is to collect, interpret, and disseminate information on the risk of a pandemic before it occurs and, once under way, to monitor pandemic activity and characteristics. To assess if the risk of a pandemic is increasing, it will focus on monitoring the infectious agent, its capacity to cause disease in humans, and the patterns of disease spread in communities. Once a pandemic influenza virus begins to circulate, it guides to assess the effectiveness of the response measures.
2. **Reducing the spread of disease:** Here it guides upon increasing the “social

distance” between people. Measures such as individual/household level measures, societal-level measures and international travel measures, and the use of antivirals, other pharmaceuticals, and vaccines are recommended.

3. **Continuity of health care provision:** During a pandemic, health systems are advised to provide health care services while attending to the influx of patients with an illness that is a pandemic situation.
4. **Communications:** The goal of communications before and during a pandemic is to provide and exchange relevant information with the public, partners, and stakeholders to allow them to make well informed decisions and take appropriate actions to protect health and safety. Effective communications about the risks related to pandemic influenza are dubbed as critical at every stage of preparedness and response and are deemed to be a fundamental part of effective risk management.

Food and Agricultural Organisation

The WHO has worked closely with FAO and OIE to coordinate Global Health Surveillance and response mechanisms to be adopted in case of a disease outbreak. In 2006, FAO and OIE launched OFFLU, a world wide network of scientists to assist veterinary professional in the task of tackling avian flu influenza. OFFLU partner institutes and veterinary experts from Australia, Brazil, China, France, Italy, Japan, the Netherlands, the United Kingdom and the United States offer training in flu separation. In 2006, WHO, FAO and OIE jointly launched Global Early Warning Response System (GLEWRS) to track transboundary health issues. Within the global frame work for control of transboundary disease FAO and OIE developed a strategy paper entitled, “A Global Strategy for the Progressive Control of Highly Pathogenic Avian Influenza” (FAO, OIE: 2005). The strategy paper outlined a ten year plan to minimise the risk of human avian influenza by stabilising poultry production, restructuring regional and international trade in poultry, improving human and food safety and improving rural development. Under this programme FAO released another proposal in March 2006, “Avian Influenza Control and Eradication: FAO’s proposal for Global Programme” in collaboration with the World Bank and OIE for the control and eradication of influenza.

Global Initiative on Sharing Avian Influenza Data (GISAID)

In August 2006, a group of leading scientists announced the formation of a consortium designed to share data on avian influenza to enhance the capacity of WHO/FAO/OIE to better understand transmission of influenza pandemics. The GISAID initiative is open to all scientists from all the streams provided they agree to share data, analyse and publish reports collectively.

The World Bank

The World Bank has established two mechanisms to help affected and at-risk countries to mitigate or do away with the treat of pandemics. The first programme announced at Geneva conference in November 2005 is a global funding programme formerly referred to as Global Programme for Avian Influenza. Under this programme the World Bank promised to provide low-interest loans of about 500 million US dollars to countries affected by H5N1 in order to supplement government resources to strengthen veterinary resources and assist in culling and animal vaccination programmes (World Bank, 2006 a). The second programme is the Avian and Human Influenza facility to assist countries which lack resources and capacity to fund their national preparedness measures. As of may 2006, the total funds committed to this programme were \$75 million (ibid). Through it global Development Learning network the World Bank also offers a series of inter-regional distance learning seminars. The first seminar held on 12 July 2006 emphasised the need for a multilateral response aimed at achieving integration in tackling the threats emanating from infectious diseases.

In addition, the Bank is working closely with developing countries, donors, the United Nations (UN) System Influenza Coordinator, and the international technical agencies—WHO, Food and Agriculture Organization (FAO), and World Organization for Animal Health (OIE)—to provide an integrated approach to the fight against flu pandemics. Since 2006, the Bank has also supported a series of ministerial conferences on avian and pandemic influenza by providing help such as work on financing needs and gaps, poultry sector bio-security compensation schemes, and global progress reports

together with the UN (World Bank, 2010a). Vietnam hosted the ministerial conference in Hanoi, Vietnam, on April 19-21, 2010, on the international response to animal and pandemic influenza threats. A key theme was the need for international and national commitment to “One Health” to deal with the threat of diseases crossing over into the human population from the animal world.

International Partnership on Avian and Pandemic Influenza

In September 2005, the United States launched International partnership on Avian and Pandemic influenza to coordinate efforts among donor and affected countries, mobilize and leverage international resources, and build the local capacity to identify, contain and respond influenza pandemic. Representatives, foreign officers and health and agricultural officials from about eighty-eight countries and nine international organisations including the WHO, FAO, OIE, World Bank, Asia Pacific Economic Cooperation and ASEAN attended the implementation meeting in Washington D.C in October 2005 (IFPA Report, 2007: 17). At this meeting the participants identified three priority areas to be addressed by collaboration which include stockpiling antiviral drugs and supplies, developing vaccines and distribution plans and implementing rapid response and containment measures. The further stress was on the need to develop local capacity-building measures since most of the countries lack adequate resources to rapidly identify, contain and respond to pandemics.

Military Response

Major disaster relief operations, such as response to the December 2004 tsunami and October 2005 earthquake in Pakistan demonstrated the prowess of the military to respond to natural disasters and call for humanitarian assistance. President George W. Bush Jr. in an interview to The Washington Post in 2005 announced that he would consider using the military to "effect a quarantine" in the event of an outbreak of pandemic influenza in the United States (The Washington Post: 2005). Military planners in Japan, the United States and the Republic of Korea have taken steps to accordingly formalise military response plans. Growing interest in and support for disaster relief missions have impelled

government officials and military planners to improve response planning and coordination in disaster response and crisis management activities, especially given the threat of emerging infectious diseases (IFPA Report, 2007: 31). However apprehensions were raised by many that significant organisational and operational challenges may complicate response efforts. These include among many, political constrains on the use of military assets, divergent operational cultures and insufficient civil-military coordination (ibid, 31).

International Ministerial Conference on Animal and Pandemic Influenza

The 7th International Ministerial Conference on Animal and Pandemic Influenza (IMCAPI) was hosted by the Government of Vietnam on 19-21 April 2010. This conference brought together over five hundred delegates from seventy-one countries (including at least thirty delegates from the ministerial level), twenty-one international and regional organizations and twelve non-governmental organizations. Organised over three days. The conference marked a significant turning point for tackling animal and pandemic influenza, moving from emergency response approaches to long term sustainable approaches (UNSIC Report, 2010: 01). The delegates at the conference unanimously reiterated its basic objectives as; need to sustain efforts to address Highly Pathogenic Influenzas (such as H5N1) and other high impact threats through one health strategies, as well as the importance of adequate readiness for pandemics and other high impact threats to human health through continued strengthening of institutional capacity for contingency planning and response at national, regional and global levels and strong interest in sustaining a global coordinated response to avian and pandemic influenza in the face of emerging disease threats.

Responses by India

The most notable response by India to any pandemic was visible during the outbreak of 2009 H1N1 nor Avian Influenza. There has been an earnest attempt by the Ministry of Health and Family Welfare (MOHFW), Government of India (GoI) to educate publics about the possible ways of transmission of flu pandemics. Several interventionist

strategies were developed by the GoI to stop the import of the pandemics H1N1. Starting from mid-April all passengers around 18 international airports were screened (MOHFW, 2009).

India has been following a phase-wise approach advocated by World Health Organization for averting avian influenza and for containment of a novel virus that could emerge and eventually get adapted for efficient human to human transmission. The strategic approach for health sector revolves around five broad areas of (i) surveillance and early detection (ii) pharmaceutical intervention (iii) non-Pharmaceutical intervention (iv) clinical management, and (v) risk communication (MOHFW).

The institutional responses envisaged National Disaster Management Authority (NDMA) and National Crisis Management Committee (NCMC) with the task of reviewing the preparedness and response and issue strategic directions for the containment operations/mitigation measures. Committee of Secretaries (CoS), Inter-ministerial Task Force (IMTF), Committee of Inter Monitoring Group and Joint Monitoring Group (JMG) are assigned the task of monitoring the situation in case of pandemic outbreak. Besides a coordinated effort of various ministries is envisaged to be effective in tackling the spread of infectious diseases. MOHFW plans to explore areas in private sector that can contribute substantially to the programme delivery. Those concerning production and stockpiling of drugs, vaccines and diagnostic reagents are deemed to be of importance. UN agencies namely WHO and UNICEF have been contributing to the capacity development and continue to do so (MOHFW, 2009).

India's plan for dealing with the pandemic so far has focused mainly on prevention of HIV infection. India has excellent small targeted awareness and successful intervention programs among high-risk groups. Indian policymakers are experimenting with different approaches to scale up the successful programs, which can then be implemented country wide with modifications to suit local characteristics. As the AIDS epidemic spread through out the world, need was felt in India for a nationwide programme and an organisation to steer the programme of eradication of AIDS. In 1992 India's first National AIDS Control Programme (1992-1999) was launched, and National AIDS Control Organisation (NACO) was constituted.

NGOs and civil society organisations have made significant contribution in

reaching out HIV prevention and care services to the highly vulnerable population groups. There are numerous NGOs working on HIV/AIDS at the local, state and national levels (NACO, Online web). Besides NACO coordinates efforts with various international organisations like; The Joint United Nations Programme on HIV/AIDS (UNAIDS), Department for International Development (UK), Centre for Diseases Control, Global Fund for AIDS, TB and Malaria, International Labour Organization, United Nations Development Programme and World Health Organization (NACO, Online Web).

Conclusion

The response to pandemic influenza A (H1N1) 2009 has revealed substantial world-wide progress with pandemic preparedness between 2005 and the present day, as reported at International Ministerial Conferences. Most countries have recently developed and/or updated pandemic preparedness plans. The expansion and strengthening of international partnerships for pandemic preparedness has continued, new partnerships have been established, with civil society, private entities, militaries, research groups and different sectors of government increasingly involved in enhancing awareness of disease spread and preparedness for future outbreaks. These partnerships have had a significant impact on hygiene and continuity planning within service providers, schools, community centres and residential institutions. They have underlined the value of effective trans-sector, multi country and coordinated working, based on trust and supported by effective communications. In addition to the multilateral and joint mechanisms, as discussed above, country specific and regional networks have also come up, but they are beyond their analysis is beyond the scope of this study. Vaccination continues to be used either as a tool to support eradication or as to control the disease and reduce the viral load in the environment. In countries where the virus has become endemic, vaccination has been employed as an appropriate mechanism for reducing its spread.

In November 2004, WHO convened a meeting to explore ways to expedite the development of a vaccine against a pandemic virus. All the major influenza vaccine manufacturers were represented. The meeting specifically considered what needs to be done by industry, regulatory authorities, governments and WHO to make such vaccines

available rapidly and in as large a quantity as possible. The differences between the response to the threat of a pandemic in 2009 and those of 1918, 1957, and 1968, when worldwide flu pandemics also occurred, are enormous. A stockpile of effective antiviral agents to treat the flu is available, public health agencies have experience in handling infectious threats, organizations and cities have developed pandemic preparedness plans that are ready to be put into action in case a pandemic outbreak worsens. Further identification of the virus as a new strain is possible within days. Monitoring organisations, such as WHO, are more sophisticated in dealing with a crises situation. Social networking tools such as the Internet, blogs, and e-mail are used by scientists to share information and by governments and organizations to keep the public informed.

Chapter Five

Conclusion

The principal purpose of this study was to understand/describe the threat posed by pandemics and analyse the reasons behind the relative neglect of the security threat posed by infectious diseases within the discipline of international relations and security studies. The cause for the lack of effectiveness of multilateral mechanisms in place to combat pandemics has also been studied. Towards this objective an extensive analysis of the existing literature on the topic has been carried out. An analysis of the basic tenets of different theoretical strands within the realm of international relations and security studies was carried out. The existing multilateral mechanisms to tackle the spread of pandemics were identified and analysed.

The hypotheses, formulated at the outset, when tested with empirical evidence yielded different results. The following general conclusions need to be highlighted:

- The lack of theorisation of Pandemics as a security threat by scholars of international relations/security studies can be partly attributed to the dominance of the traditional state centric notions of the security.
- International relations/security studies failed to integrate pandemics in the larger frame work of security due to the conceptual challenges of securitising pandemics, and due to intellectual opposition to broadening the agenda.
- Extensive diagnostic and surveillance and multilateral networks, as well as novel vaccine and antiviral development strategies, which limit the impact of pandemics, are in fact present and functional.
- The pandemic experience permits no easy generalisations about the future. Based on our limited store of evidence, we can neither easily forecast neither the source, nor the severity of future pandemics.

It is clear that initial hypothesis, wherein it was argued that there is paucity of effective multilateral networks to tackle threats of pandemics, yielded a different result. In

analysing the responses to the pandemics at the global level it was found that there is no dearth of them. These mechanisms are dealt in detail in the fourth chapter on 'responses at the global level'.

It was found that the infectious diseases have become increasingly important in the agenda of state policy makers, especially among the more developed countries. In the United States, for example, the national intelligence council recently undertook an examination of the security implications of infectious diseases, coming to the conclusion that "HIV/AIDS represents a threat to the national security of the United States" (National intelligence council Report, 2000). Recognition by policy makers of the importance of changing patterns of health and disease for international relations has taken place in response to three related developments. First, there have been direct effects on developed countries through increased travel and migration and implications for economic interests. Second, because of the implications for these states as a result of emerging and resurgent infectious disease. Third, social movement mobilisation around global health issues has increased. This has brought certain health issues close to the top of the global political agenda at G8 summits and the UN Security Council, and resulted in major new policy commitments by member countries.

The response to pandemic influenza A (H1N1) 2009 has revealed substantial world-wide progress with pandemic preparedness between 2005 and the present day, as reported at International Ministerial Conferences. Most countries have recently developed and/or updated pandemic preparedness plans. The expansion and strengthening of international partnerships for pandemic preparedness has continued, new partnerships have been established, with civil society, private entities, militaries, research groups and different sectors of government increasingly involved in enhancing awareness of disease spread and preparedness for future outbreaks. These partnerships have had a significant impact on hygiene and continuity planning within service providers, schools, community centres and residential institutions. They have underlined the value of effective trans-sector, multi country and coordinated working, based on trust and supported by effective communications. In addition to the multilateral and joint mechanisms, country specific and regional networks have also come up, but their analysis is beyond the scope of this study. However the responses by India have been taken into account. Vaccination

continues to be used either as a tool to support eradication or as to control the disease and reduce the viral load in the environment. In countries where the virus has become endemic, vaccination has been employed as an appropriate mechanism for reducing its spread. The differences between the response to the threat of a pandemic in 2009 and those of 1918, 1957, and 1968, when worldwide flu pandemics also occurred, are enormous. A stockpile of effective antiviral agents to treat the flu is available, public health agencies have experience in handling infectious threats, organisations and cities have developed pandemic preparedness plans that are ready to be put into action in case a pandemic outbreak worsens. Further identification of the virus as a new strain is possible within days. Monitoring organisations, such as WHO, are more sophisticated in dealing with a crises situation.

A review of literature shows a significant shift in the focus of international relations/security studies. Dominant narratives of Cold War era focused attention on state as a primary referent. A shift was visible in security studies in the 1980s. Scholars argued that the focus was too narrowly defined. Arguments for the inclusion of diverse threats to security gained momentum later towards the end of the century. The ultimate result was the conceptual decentring of security to the level where in the main thrust is on human security, which includes threats as diverse as economic, political, ecological and societal and so on.

The theoretical approaches to security highlight the differences across the approaches. The level of analysis shifts from the state to the individual as one proceeds from realism to critical theory through liberalism, constructivism and Communitarianism. More importantly, the scope of what might be considered a threat to security becomes broader, with realism identifying possible existential threats to the state security while liberal and critical theory conceptualise security as factors that may infringe on individual freedoms and interests. Clearly the schools of thought formulate and prioritise threats to security differently. Though, in all the theoretical approaches analysed, there are few explicit references to the threat from pandemics, but on extrapolating the basic tenets of different approaches one can judge the amount of flexibility that each of them allows for tackling non traditional security threats.

It can be said with a degree of certainty that the international relations theory in

general and security studies in particular has remained oblivious to pandemics as a security threat. A variety of factors have contributed towards this partiality. At the first instance, was the conceptual challenge related to 'securitising' pandemics. Several policy makers and academics have called for a redefinition of international security to include health threats. Using the rubric of human security, advocates assert that the health of a population is of utmost importance to state stability. Many argued that redefining security to include issues of health and infectious disease is important to make the concept of security more relevant to the challenges states face in the post- Cold war era. Despite the popular support, some scholars within the security studies community reject the notion of the changing the concept of security to include infectious diseases. They claim that doing so would dilute the meaning of security, making it a catch-all term for anything negative. While not necessarily denying that infectious diseases can pose a severe burden to a state, these scholars claim that it does not pose the same existential threat to survival of state. Human security and health security issues largely remain on the margins of literature on international security.

Many proponents of the health security look to the historical record to reinforce their claims about the importance of infectious disease in impacting on the international system. Thucydides recalls how a mysterious plague felled the Athenian army, playing a decisive role in the outcome of the Peloponnesian War. The Black Plague, which killed approximately one-third of Europe's population, played a decisive role in bringing about the end of the feudal system and encouraging the 'Reformation'.

Even with this attention, some still remain skeptical, if not hostile, to attempts to broaden the security studies agenda. The controversy over human security and health security has spawned an impressive amount of discussion and debate. This research study attempted to demonstrate that the threat from pandemics is a legitimate concern for security studies. Among those most stridently opposed to broadening the security agenda were those who argued forcefully against broadening the definition of security on the grounds that it would distort the attention of the security analyst as well as policy makers. Deudney argues that national security and environmental degradation are too dissimilar to fall under the same heading because of the type of threat each poses, the source and scope of the threat, the degree of intention about the threat, and the types of organisations

designed to protect people from these threats. The opponents go on to argue that employing the rhetoric of national security for the non-traditional threats facing society may actually turn out to be counterproductive. It is argued that doing so would destroy the intellectual coherence and integrity of the discipline while distracting researchers and policymakers from crafting viable solutions to these problems.

Some scholars do applaud recent efforts to narrow the concept of human security, but most of them remain skeptical that such efforts ‘proceed in a haphazard fashion without explaining their rationales.’ The ambiguity and flexibility of the definition of human security is cited as its greatest problem

Focusing specifically on the integration of infectious disease into security studies, offers one of the most far-reaching critiques. The advocates of human security and national security talk past each other at nearly every turn, undermining any serious engagement over whether and how infectious diseases threaten security.

Fearing swift and severe economic disruption, a loss of public confidence, and the undermining of societal functioning, governments may choose to frame pandemics as a first-order issue of national security, one which would alter the premise for all other activity. In adopting such an approach there is potential to rally political support for improving and mobilising public-health resources. This calls for a direct proportionate relation between the issue to be securitised and the level of politicisation. Public policy needs to be translated into practical consideration by the careful application of the existing mass media.

Several multilateral mechanisms, as already mentioned, are in place to tackle the spread of infectious diseases; still we experienced the recurrences of certain pandemics at several stages in the history. One reason that takes a toll on the effectiveness of these multilateral networks is the emergence of more virulent strains at each stage of recurrence. The medical world fears that increased resistance to drugs against several varieties of the infections may pose difficult and serious problems for the health workers and populations over the globe in the decades to come. Antibiotic-resistant microorganisms, sometimes referred to as ‘super bugs’, may contribute to the re-emergence of diseases which are currently well-controlled. This problem is further exacerbated by overuse of antiviral agents. The overuse contributes in the emergence of

resistant strains.

Divergence in poor and rich countries on the resources front further complicates the problem. Lack of capacity to tackle threats emerging from infectious diseases by a particular country renders the efforts at the part of others as useless. Response capacity is measured at levels ranging from vaccine manufacturing to the sensitivity of surveillance systems, the number of hospital beds, the affordability of diagnostic tests, and the supply antiviral drugs and vaccines.

In short, the dominance of the traditional state centric notions of security and opposition to the broadening agenda has restricted the international relations theory from accommodating non traditional security threats within the ambit of dominant narratives. Debate among the scholars on securitising pandemics or for that matter other non traditional security threats was instrumental in non theorisation of pandemics as security threat. Though several multilateral networks to tackle pandemics are in place their effectiveness needs further scrutiny and eventual improvement. The nature of infectious disease is such that they permit no easy generalisations about the future. There nature is such that we can forecast neither the source, nor the severity of future resurgence.

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