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Traditional Medicinal Knowledge and Intellectual Property Rights: A Review

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Abstract

Indian society has been experiencing medical pluralism with diverse health care practices since time immemorial. The folk traditional healers and their medicinal knowledge are promoting the health and well-being in primary health care level for many poor people in developing country like India. The contributions made by traditional medicinal knowledgeable healers in local health care practices are important as their knowledge helps to produce therapeutic healing properties from medicinal plants, animals and minerals. Bio-piracy and implications of Trade Related Intellectual Property Rights (TRIPs) for the third world countries are the two greatest threats to their knowledge and survival means. Under World Trade Organization (WTO) regimes patents and copyrights are awarded to people and organizations to protect their creative and innovative inputs into products and processes. The Western Intellectual Property Rights (WIPRs) regimes has divided the North-South inequality in terms of economic development and this monopoly has brought the third world countries to face the problems of survival crisis as most indigenous people depend on their immediate biodiversity. Sui-generis system is one of the means to protect traditional knowledge and bio-diversity from this regime.

Key words: Medical pluralism, folk traditional healers, therapeutic healing properties, biodiversity, Sui-generis system, traditional knowledge

Introduction

The Indian society has been flourishing with diverse healing traditions, which is based on classical knowledge as well as regional folk health care practices. The knowledge of the medicinal value of flora and fauna utilization can be traced back to the earliest settlers of indigenous people in India. The modern time streams of folk healing and the Indian system of medicine such as Ayurveda have come down as a result of long evolution through trial and error and continuous exchange and assimilation among various forms of indigenous medical systems, which still co-exist in Indian society today ¹. The challenge of being superiority of a particular medical system such as the superiority of modern day biomedicine causes medical ethnocentrism. Social anthropologist, sociologists and other social scientists found that such unethical practices cause barriers to health care services because of the provider and recipient different attitudes, beliefs and expectations ². Anthropologists and Archeologists study show that the people of Indus valley civilization used the medicinal values of plants and trees and had an advanced knowledge on hygiene and water sanitation awareness of health management. Such knowledge of medicinal plants and health care practices are still used by Ayurvedic doctors and folk healers ³. During Vedic period, the migrants Aryan tribes used Vedic hymns as healing practices in the Indian sub-continent. Most of the ailments both physical and mental in this period were believed to be caused by spirits and they were healed and cured by rituals, charms, mantras, medicines and surgical intervention ⁴. Ancient Indian Medicine (AIM) started to develop during the post Vedic period (800 BC to 1000 AD) because various cultures were interacting in smaller kingdoms and urban centers and there was an importance of cultivating compassion and humanistic values as being an integral part of health and well-being ⁵. It is acknowledged that Buddhists monks disseminated Indian Medical Knowledge westward to Persia and central Asia, China and South-East Asia and Sri Lanka during and after the reign of Ashoka the Great ⁶. The Atharva Veda is considered to be the source of

modern day Ayurveda, which deals with several diseases with their treatments through medicinal plants, herbs and religious rituals⁷.

The indigenous people were practicing their health care practices in closed relationship with their environment. The health care practices include home remedies, nutrition, bone setting, snake bites, insects' bites, scorpion bites, sprain reflexology, mental disorders and ritual healing. They have their own medical folklore and practices. These knowledge and practices have been transmitted by oral tradition from generation to generation as a traditional medical heritage⁸. During the colonial period, the Indian armies were relying on the local health practitioners as they were suffering from small pox⁹. There are around two million folk healers who are catering the health care needs of different communities and tribes in rural, remote area and foothills of India. They are neither officially recognized nor registered and their healthcare practices are different from other systems of modern medicine¹⁰.

The Role of Traditional Medicinal Healers for Primary Health Care

Traditional healers and traditional medicine play a pivotal role in preventing diseases, healing and promoting of health conditions of indigenous people across the world¹¹. There should be a fundamental change for a healthy promotion and development of traditional medicine as one of the compulsory ways to achieve the universal health care coverage of the world population¹². In this context traditional healers become an integral part of the healing system in every human society. They are caring and empathic people for their patients. They are expertise in psychotherapy and counseling¹³.

African Regional Office (ARO) expert group defined a traditional healer as 'a person who has the recognition from the entire community because of his/her medicinal knowledge to provide health care by using vegetable, animal and minerals substances which are mainly based on the community sensitivities of their socio-cultural and religious background as well as beliefs, attitudes and knowledge which are parts of the community'¹⁴. World Health Organization Regional Office for Africa that met in Brazzaville in 1976, defined traditional medicine as 'the sum total of all the knowledge and practices, whether decipherable or not, utilizing in diagnosis, promoting health and prevention of diseases and healing of physical, mental or social imbalance and relying exclusively on empirical experience through observation and transmitted the knowledge from generation to generation, whether verbally or in writing'¹⁴.

Therefore, traditional medicinal knowledge include various health care practices, approaches, body of knowledge-codified or un-codified and beliefs system incorporating plants, animals, minerals based medicinal properties, spiritual therapies, manual techniques which can improve well-being as well as to treat, diagnose or prevent illness¹⁵.

Traditional Knowledge and Bio-piracy

The contribution of indigenous traditional knowledge practices to modern pharmaceutical industry and big corporations is great extent. However, indigenous traditional knowledge, which has never been patented and has been in the public domain of traditional and indigenous communities for centuries, is endangered because of bio-piracy¹⁶. 'The term bio-piracy is referred to the unauthorized use of biological resources such as medicinal plants, animals, micro-organisms, genes and indigenous traditional communities' knowledge of biological resources by big transnational corporations and global pharmaceutical industries'¹⁷. Most of these bio-resources and knowledge are found in the third world developing countries like India. The fact is that more than 90 per cent of the world's biodiversity is located in Africa, South America, Asia; indigenous communities which have nurtured and developed such knowledge are less compensated for their native knowledge, which is taken from them. Such inequity is affected owing to the growing use of patents, which grant exclusive protection to

Northern corporations and researchers for material or knowledge, which originated from the south¹⁸. A majority of the populations of the third world in the South heavily rely on indigenous knowledge for their survival. According to the report of the Rural Advancement Foundation International (RAFI), it was estimated that '80 percent of the world's population still continue to rely upon indigenous knowledge for their health care needs and moreover two-thirds of the world's population could not survive without the foods provided through indigenous knowledge of flora and fauna, microbes and farming systems'¹⁹. Shiva (2000) clearly points out that 'bio-piracy and patenting of indigenous knowledge is a double theft because first it allows theft of creativity and innovation, and secondly, the exclusive rights established by patents on stolen knowledge steal economic options of everyday survival on the basis of our indigenous biodiversity and indigenous knowledge. Over time, the patents can be used to create monopolies and make everyday products highly priced'²⁰.

Trade Related Intellectual Property Rights (TRIPS)

In our modern time, ideas and knowledge are considered as an integral part of trade relations. Patents and copyrights are awarded to people and organizations to protect their creative and innovative inputs into products and processes through World Trade Organization's regime (WTO). This system of implications really affect for those who live in poor developing countries²¹. The North-South inequality in terms of trade and economic developments are owing to the Western Intellectual Property Rights regimes (IPRs) and because of this, most of the indigenous communities in the third world countries face the problems of livelihoods and survival since the majority of the indigenous people in South depend on their biodiversity²⁰. In this context, anthropologists and sociologists have a pivotal role to protect the indigenous knowledge of biological resources and intellectual property rights of the indigenous communities²². "Intellectual Property Rights are those rights, which are given to the creators to prevent others from using their inventions, innovative designs or other creations and to use that rights to negotiate payment in return for others using them and some of the areas, which covered under the Trade Related Intellectual Property Rights (TRIPs) are (i) Copyright and related rights; (ii) Trademarks including service marks; (iii) Geographical indications; (iv) Industrial designs; (v) Patents; and (vi) Lay-out designs of integrated circuits"²³.

Implications of Trade Related Intellectual Property Rights for the Third World Countries

The most burning issue is that knowledge can be patented, which has serious implications for access to health, agricultural practices and other health related fields. The western countries dominance of intellectual property rights can be seen from the following data: 97 percent of all patents worldwide is concentrated in a handful of countries; in 1993, ten countries accounted for 84 percent of global Research and Development (R &D); 95 percent of the patents granted in the United States (US) over the past two decades were conferred on applications from ten countries which captured more than 90 percent of cross-border royalties and licensing fees; 70 percent of global royalty and licensing fee payments were between parent and affiliate in Trans-National Corporations (TNCs); and more than 80 percent of the patents that have been granted in the Third World Countries (TWCs) belong to residents of industrial nations²⁴.

Trade Related Intellectual Property Rights (TRIPS) and Public Health

Under the Trade Related Intellectual Property Rights' (TRIPs) agreement, a pharmaceutical company can obtain a patent for both the process and product for 20 years. The product patents provide for absolute protection of the product, whereas process patents provide protection in respect of the technology and method of manufacture. A process patent system promotes a more competitive environment and a check on prices, as compared to the monopoly system created through product patents. With the TRIPs agreement for both the product and process patents, it will therefore be possible to apply for patent rights over a product for 20 years, and thereafter, further

periods of protection could be applied for the processes by which the product is produced²⁵. However, the member country of the TRIPs agreement can still access to drugs and protect public health under ‘compulsory drugs licensing.’ According to the Article 31 of TRIPs, the member states ‘may use the subject of a patent without the authorization of a right-holder including used by the government’ in the public interest. Further, there is also a provision that the ‘right-holders shall be paid adequate remuneration taking into account the economic value of the authorization’²⁶. Hence, the governments can grant a license to make copies of patented drugs without the approval of the patent owner and pay a royalty to the latter. This option has been used by countries to restrict the monopoly rights of companies, the patent holders, in the interest of the public good²⁷. As ‘Health’ is a state subject, there should be freedom of right to access to medicines without the influence of TRIPs in the third world developing countries²⁸. Therefore, planning of a national health services and establishment of free access to services at the point of delivery should be a fundamental social right of democratic citizenship²⁹.

The Need for the Protection of Traditional Medicinal Knowledge

It is clear from the above discussion that the implications of IPRs for the Third World countries, and the subsistence farming communities and indigenous population within these countries, are very severe. Not only their knowledge is stolen but also their very survival is threatened without any compensation for their knowledge. The IPR regimes are structured in order to suit the logic developed by the North, which is based on individual rights is alien to the community ownership of indigenous and traditional communities³⁰. Some of the characteristics of indigenous knowledge are collective rights and interest, their ecology and environment such as medicinal plants’ sacred groves and transmission of the knowledge by oral tradition^{31,32}. As it is also mentioned earlier that 80 per cent of world population depends on indigenous and knowledge for their primary health care needs and two-thirds of the world’s population depends on their community bio-resources. However, the indigenous knowledge and products from developing countries are exploited and converted to foreign-owned private property; effectively depriving developing countries of the commercialization value of their heritage via exports and value-added processing. For example, through the IPR protection the US has owned the trademark on South Africa’s indigenous *Rooibos* tea, which is becoming increasingly popular worldwide³³. The indigenous and traditional knowledge and its bio-resources of the indigenous communities should be protected through ‘Sui generis system, including their cultural and traditional practices, beliefs, customs, spiritual qualities, knowledge and cultural heritage’³⁴. The ‘Sui generis system’ means ‘unique’ or ‘of its own kind’. It is a system, which is unique and does not belong to an existing category of IPR³⁵. The above studies provide a wide range of discussions on the Indian healing traditions, concepts of traditional healers and medicine and the burning issues and concerns of the rights of indigenous traditional healers in developing countries in general and particularly in India.

Conclusion

It is widely acknowledged that Indian society has been thriving medical pluralism including indigenous local health care practices in various parts of India with regional diversities. Their knowledge and health care practices have contributed a plethora of medical knowledge for health care provisioning for the poor people in developing country like India. Nevertheless, their knowledge and survival means are a great threat because of bio-piracy and Trade Related Intellectual Property Rights (TRIPs) regime under the monopoly of World Trade Organization (WTO) mostly in the third world countries whose survivals are depended on their biodiversity.

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