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Title:

**“The future of the innovation system policy in developing countries:
Through an analysis of the pharmaceutical companies in Algeria”**

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Subject area:

Spatial dimensions of technology transfer

Abstract:

The objective of the paper is to evaluate the adoption and adaptation of public innovation policies in developing countries, and especially in the case of Algeria. As many authors have pointed out, innovation is seen as a determining factor for business competitiveness and regional growth. However, innovation is determined by the economic and industrial context and then becomes a difficult phenomenon to promote or apply.

But how can governments promote or drive innovation? Can developing country governments follow the course or the path followed by rich and developed countries? However, this is an unresolved issue in the academic literature that has involved currents of controversy.

We propose to develop a model, based on an analysis of the academic literature, after that we analyse the weather of the innovation system policy in pharmaceutical companies in the region. The research in aim, takes into account those factors and the predominant innovation model in the region.

Keywords: *innovation system policy, pharmaceutical companies in Algeria .innovation system in developing countries.*

1. Introduction:

The selection of innovation policies is a decision for which all countries around the world must take. There is a clear demand for an adequate policy to promote innovation and thus, economic growth. Recently, the subject has attracted the attention of researchers who link innovation and innovation policy to development (Katz, 2014; Perez, Marin, & Navas-Aleman, 2010; Dantas, & Bell, 2011; Lizuka, & Katz, 2012; Lizuka & Soete, 2011; Andersen, 2012; 2012b; Morris et al., 2012).

However, several initiatives have been taken at the international level to measure innovation such as The Frascati Manual (2002) which is a standard practice proposed for research on innovation and experimental development. Also, the Oslo Manual (3rd Edition), which shows the guiding principles for the collection and interpretation of innovation data and OECD (1995), which measures scientific and technological activities.

In regard to the innovation policy, it is a vast concept that has been utilized as a tool imposed solely by the state administration. Besides, technological science and innovation policies can help to promote a change of behavior of the economic agents, articulate the demand and offer knowledge, stimulate the development of sectors and promote new sectors of competitiveness (Kuhlmann & Ordonez-Matamoros, 2017: p13). Innovation policy is considered as a complex phenomenon (OSLO Manual, 2005). However, the concept of the innovation system is the result of understanding the phenomenon of support or progression of regional and or national systems. Lundvall defined the National Innovation System (1992) as an "open, evolving and complex system that encompasses institutions and economic structures". The quality of its elements and the relationships between them determine the pace and direction of innovation and skill building from a combination of learning based on scientific experience.

As long as the policy of innovation is considered on learning from experiences and interaction between actors, the emergence of collaboration between North and South or developed and underdeveloped regions, can facilitate exchanges in matters of knowledge and experience and thus facilitate contingent policies.

On the other hand, policymakers have a diplomatic focus on how to import knowledge through international collaboration. Regarding collaboration between countries the developing countries are more affected by taking advantage of the experience of the developed countries, with organizations such as; the Twinning Program, which is an EU instrument for institutional cooperation between the public administrations of the EU Member States and partner countries and also The eight Millennium Development Goals (MDGs) aim to reduce half of the poverty rates and provide universal primary education.

Notwithstanding, the collaborations allow for the transfer of basic concepts, in terms of decision-support tools in crisis countries. Even so, the main interest of these initiatives is to understand and analyze how innovation policy should be designed from the exchanging experiences between developed countries and developing countries. However, the innovation policy so far is not well defined. The innovation policy is always characterized by general and macroeconomic notions. However, the developing countries suffer from the failure of innovation policy. In fact, as a consequence, awareness on finding an adequate innovation policy is increasing.

The understanding and approach to innovation policy through the national innovation system (Freeman, 1987; Nelson, 1993; Barre, 1996) has been largely undertaken by researchers. Meanwhile, other theories were elaborate in order to deepen on the question of innovation as considering the predominant innovation model in the region (Fernandez de Lucio, 2010). However, each model or approach was considered from a specific characteristic of a specific country or a specific context.

2- Methodology:

The methodology will be based in a field study for analyzing the situation regarding innovation of various firms based in Algeria working in the pharmaceutical field as well as the data available in the Algeria industry ministry.

The case study will be carried out by interviews among the pharmaceutical companies and collecting information from the national databases.

3- Expected results:

Present the indicators related to the environment of the Algerian economy which may reflect policy innovation in Algerian companies.

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