

## **Health Care Delivery System in Developed Countries, Developing Countries, and Undeveloped Countries**

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### **Open Innovation**

Open innovation takes many forms from crowdsourcing to structures, organizational alliances, and strategic co-ventures. Open innovation strategies acknowledged good ideas from anywhere “the outside-in approach or Intellectual property” (IP), created added value due to its licensing arrangement, joint ventures, and other strategic collaborations. The combination of internal and external ideas and paths to market to make advances in processes or technologies, a striking model for structuring collaborations between developed and developing countries. The crafty approach designed new ways of working.

Innovation “use of purposive inflows and outflows of knowledge to accelerate internal advances and expand the markets for external use of modernization” defined innovation (Chesbrough, 2006). The definition emphasized, importance of organizations putting greater emphasis on collaboration and networking (Vanhaverbeke, 2006).

A well-structured article, goals clearly stated and a recently published editorial. Findings displayed in the form of figure and discussion. The use of the point method approach carefully analyzed the commentary. The usage of the open innovation model highlighted the relevance of recent research on the topic.

### **Literature review**

Innovation a tool that disrupts poverty and had gained force since the middle of 2000’s among major international development. Innovation allowed for networking and support improvement in development, such as investment funds, Human Development Fund and other partnership with the Global Development Innovation Ventures. However, organizations today focus to open innovation activities and form different structures of cooperation (Chesbrough, 2003). The author further argued that innovation approaches applied by organizations had shifted from closed to open systems. The open innovation model presumed that organizations should use external and internal ideas and paths to market and look towards advancement in technology (Chesbrough, 2004). Through open innovation, knowledge widely distributed and firms can network effectively in order to gain access to the pool of knowledge. The bilateral flow of knowledge contributed to stronger roles by Income Property Management and open further means of revenues.

Open innovation collaborations fostered true co-creation among partners in rich and poor settings and broke down hierarchies and created greater impact and value for each partner. Child Health initiative, Concern Worldwide’s Innovations for Maternal, Newborn an annotation described an early stage pilot project that focused on open innovation in a low resource setting. The focal point of the process involved a range of partners and the ability; adapted and changed on sustainable by extending the collaboration to include developed country partners.

However, a broad range of scientific studies identified how maternal, fetal, newborn and infant health outcomes affected factors including nutrition, infection and exposure to environmental toxins. Hence, the research study of the causes of preterm birth (PTB) one of the leading cause of infant mortality, initiation of innovative strategies for prevention. Development of biomarkers for

PTB, an application in early pregnancy to predict impending PTB and thereby use to set up preventive measures and treatments.

The funded project established metrics for and discovered the causes of, growth faltering in utero and during the first two years of life. The window period, which serious health problem can impair growth and affect long-term health. Therefore, new ways to prevent or reverse unhealthy growth marked by stunting and wasting. In order to better guide and check healthy growth interventions the Grand Challenges Explorations program and other efforts sought new approaches measuring physical growth, brain function, and development (Bill Gates Foundation, 2014).

Worldwide's Innovations for Maternal, Newborn and Child Health (Innovations for MNCH) initiative an implementation project "tapping into local talent and creative problem-solving design". Many studies showed a large number of health facilities either lack of needed basic equipment for Innovations for MNCH clinical service delivery. World Health Organization (WHO) estimated that up to seventy percent (70%) of laboratory and medical equipment were out of service in some low-resource settings (WHO, 2000). Due to the fact, of a high procurement or replacement cost, supply chain problems or design customized not suitable to meet local needs (Thairu, 2013). Lack of reliable and access to functional, high quality and cost-effective equipment, Innovation for MNCH encountered difficulties to interpret and increased the demand for maternal, newborn and child health services to save lives.

### **Article summary**

The combining of internal and external ideas and paths to market in organizing to make advances in processes, an excellent model for structuring collaborations between developed and developing countries entities. Turning to developing countries as a source of innovation had become the principal business practice for many of Western-based, multi-national corporations (MNCs). On this drive, MNCs spent billions of dollars every year looking for new solutions and to find unmet needs (Innovation Pessimism, 2013). Hence, innovation propelled growth and success in business.

Innovation collaborations aided in fostering true co-creation among partners in both rich and poor settings. The approach broke hierarchies and created a greater bond for each partner. Primarily the fear of competition and alternative ways cause many MNCs to change the longstanding ways of work in emerging economies. General Electric (GE) for example, developed products at home and sold, modified, stripped-down versions to customers in emerging markets and trailed global growth (Govindarajan, 2011). However, the products were too expensive for large segments of the markets to customers' needs and local contexts. Conversely, this opened opportunities for local competitors to offer low-cost alternatives to meet local customers' needs. Consequently, the growth for high-end products in rich countries slowed and the quality of low-cost alternatives improved and disrupted conventional markets and actors.

The literatures reviewed focused on how discrete innovations or technologies generated in a developing country and how it could be adapted to developed countries perspective following a typical reverse innovation pathway. The research targeted innovation for MNCH equipment gaps in a large, urban hospital in Africa and tested working samples that have the potential to fill the gaps and met all safety and working standards (Wirth, 2012).

### **Article structure**

The review detailed an early-stage pilot project structured on open innovation in a low resource setting. Communities were centrally placed in the process which had involved a range of partners, ability and consideration on how adapted, changed and sustained by extending the collaboration including developed country partners. The abstract gave an overview of the article. The headings guided the reader and allowed for accessing information easily.

The detailed and well-formulated background section with a clear focus. The literatures reviewed directed “on how discrete innovations or technologies generated in developing country could be adapted to a developed country context following a typical reverse innovation pathway”. The “frugal innovation” application principles were of ultra-low cost, durable, easy to use, draw sparingly on raw materials and minimized environmental impacts. These factors were suited to any health sector under increasing pressure to meet better outcomes at lower costs much.

The figure sections highlighted specific areas of the study. No method used in the article. The discussion section concluded that there were ten areas of health care where developed countries had the most to learn from developing countries. The conclusion short and recommendations made to new models for the international cooperation, exploration and the early experience from the Innovations for MNCH initiatives. References clearly cited, connected to other authors and websites. Additionally, the article connected with other subjects such as reverse innovation, which allowed for extensive evaluation.

Globalization and Health HTML article, recently published and abbreviation and key terms defined.

## **Article critique**

### **Authority**

“Open innovation as a new paradigm for global collaborations in health”: Innovations for Maternal, Newborn, and Child Health is an Open Access commentary distributed under the terms of the Creative Commons Attribution License. Globalization and Health 2013@ 2013 Dandonoli; licensee BioMed Central Limited.

Patricia Dandonoli was the Senior Advisor to Concerns Worldwide’s Innovations in Maternal, Newborn, and Child Health and served as the Director for the period 2011- 2012 respectively. Ms. Dandonoli was also the founding President and Chief Executive Officer of WaterAid America, the United States associate of a leading International Non-Government Organization. Patricia Dandonoli roles, ensuring access to safe drinking water and effective sanitation.

In the Office of Her Majesty Queen, Rania al, Abdullah of Jordan, her experiences, planned and managed many educational and cultural initiatives. She was also the advisor and senior executive in a range of not-for-profit organizations and philanthropist and for-profit social enterprises. Linkages of other authors in the references section.

### **Accuracy**

The commentary was a current research project on open innovation. The open innovation model brought to the market, ideas and showed where enterprise generated, developed. The enterprise sought ways by used in-house ideas, its network partners and deploying multiple pathways and brought products and services to the market.

Additionally, the Innovations for MNCH Maker projected by tackling the main reasons for the lack of equipment. Hence, the formation of an open innovation network among local academic, medical, engineering and manufacturing partners. The editorial and refereeing aspects contributed to the accuracy.

### **Currency**

The research described is current. The references cited in the article ranged from 2000 to 2013. The journal received for publication on the 31<sup>st</sup> January, accepted on the 5<sup>th</sup> July, and published on the 30<sup>th</sup> August, 2013.

## **Relevancy**

The journal focused on business strategies useful for open innovation networking among local academic, medical, engineering and manufacturing partners. Open innovation, a model that combined internal and external ideas to advance technologies and processes, creating boundaries between an entity and its open environment by making it permeable (Chesbrough, 2003).

In addition, open innovation varies in the form of crowdsourcing that is, to structured organizational alliances and strategic co-ventures. Involving in such strategies allowed for ideas from anywhere the “outside-in” dimension of open innovation. This approach insisted on new ways of working and innovative business models (Chesborough, 2003).

This aspect is vital, mainly for academic interested in nursing innovation, moreover in health generally. The commentary was easy to read, not relevant to first to first year students.

## **Objectivity**

A current research well supported. Open innovation collaborations, a design to foster true co-creation among partners in rich and poor settings its focus. To break down hierarchies and created greater influence and merit for each partner. “Concerns Worldwide’s Innovations for Maternal, Newborn and Child Health initiative” an example used to highlight the feature of the article.

No evidence of bias noted. The distinct innovations or technologies generated in developing countries a method adapted to developed countries situation following a typical reverse innovation pathway an example used in the literature review. The commentary supported with the relevant references and key terms defined.

## **Stability**

The commentary described an ongoing collaboration or network among clinical worker, biomedical engineers and specifically maternal, newborn and child health equipment challenges. Hence its stability in an academic database.

## **Analysis of figures**

Figure one – Networked open innovation

The open innovation framework generated, developed and brought to the market ones own ideas. Its network partners used in-house ideas. The network strategies enable innovations easily in and out and connect with new markets, more users and had a greater influence.

Figure two – Concern Worldwide’s Maker Hub

The hub was for attractive partnership between developed and developing country entities. The structure also changes the meaning for “outside-in” due to the network members which included both developed and developing countries.

The Maker Hub a social enterprise, structured around community engagement and user-centered solutions offered the potential knowledge. Social enterprises in developing countries have the tendency to lively entrepreneurial which supported a large and established research and development program.

## **Recent advances related to the topic**

The future of innovation in global health shared learning across borders and the historical gradient of inequality. There are some fundamental factors suggested

- How will it benefit the poor, this critical question remained the center of global health partnerships in every aspect; whether for research, policy or service delivery. Promote conversations between implementing partners, funding institutions and policymakers.
- Asking questions that matter to patients, global health research main agenda focused on the patients and listening (Kleinman, 2006).

- Experimentation across contexts, learning collaborative, between diverse partners in one setting and international collaborators (Bell, 2006).
- Open access for open dialog, open access journals an essential tool for channeling the benefits of shared innovation.
- .Reciprocity and respect were an intellectual partnership, where global health was the main goal equity. In poor countries, scientists and program managers provided creative ways and cultural resources of any rich country. Hence, by providing universal access to high-quality, high-value care, a two-way learning method (Farmer, 2013).

### **Models of open innovation**

The advancement involved developing and introducing a moderate completed product. The goal, to ably access, customize and exploit; and for contributors to extend the platform product's quality while increasing the global value of the product for all involved. Availability of the software development kit (SDK) or the application programming interface (API) are examples of product platforms. The approach seems in markets with strong network effects. The demand increases depending on the number of developers attracted to the use of the platform tool-kit. The increase of platforming resulted in the improved complexity of administration and quality assurance (Schutte, 2010).

The model entails a system that allowed for competitiveness among contributors and the rewarding of successful submissions. The method provided for the organization with inexpensive access to large quantities of innovative ideas. On the other hand, provided a deeper insight into the needs of customers and contributors.

However, the technique had engaged extensive customers' interaction with employees and companies that accurately merged customer response. The close involvement in the design process and product management cycle. In addition to product platforming, organizations incorporate their contributors into the development of the product.

This aspect differs from platforming and provided the framework on which contributors develop and hosting organizations control and support the eventual products developed in collaboration with their contributors. This controlling method ensured organizations developed the correct products as fast as possible. Conversely, reduced the overall development cost. This method was considered and supported for open innovation in the Optics and Photonics Industries by Doctor Chesbrough (Chesbrough, 2013).

Organizations pulled a network of contributors in the design process by offering rewards in the form of incentives. Open innovation offered many benefits to companies.

The benefits of open innovation

- Reduction of cost in conducting research and development
- Potential for improvement in development productivity
- Incorporation of customers early in the development process
- Increase in accuracy for market research and customer targeting
- Potential for synergies between internal and external innovations
- Potential for viral marketing

### **Conclusion**

Innovation allowed for networking and supported improvement in development, such as investment funds, Human Development Fund and other partnership with the Global Development Innovation Ventures. Internal advances and expand markets accelerated the inflows and outflows of knowledge

The model entails a system that allowed for competitiveness among contributors and the rewarding of successful submissions. The method provided for the organization with inexpensive

access to large quantities of creative ideas. On the other hand, provided a deeper insight into the needs of customers and contributors. In summary, many advantages had derived from the process which contributed significantly to globalization and health.

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