

A Study of Pharmaceutical Education Management in India with Special Reference to the Prospects of Indian Pharmaceutical Industry

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Abstract- *The two pillars of present dynamic era of globalization are innovation and information, and both are knowledge intensive, new information technology and globalization together driving the innovative processes approach in the pharmaceutical companies work place, the manufacturing and manufacturing of products and services, relates among countries, with this revolution no community is immune with these changes and the effects. The relations in the fundamentals of human life and social activities effected. Globalize and digitalize fast growing information in pharmaceutical education and industries produce goods and services which are very productive and knowledge intensive. The present massive capital depend on the movements of knowledge, communication, and information in digital places of dynamic countries of present era. Highly portable; Knowledge era lends itself easily to globalization. Present study describes of the new efficient areas which, if taken up with seriousness, could make for a turnaround in the current scenario of obsolescence and sluggishness in our pharmaceutical information management in the era of digitalization.*

Keywords- Globalization, Innovation and Information, Pharmaceuticals.

I. INTRODUCTION

Digital education is a big idea and a buzzword. Digital pharmaceutical education is a term use in management that means for work out in a holistic manner that exist and reconstituting dynamic organizations recommendations on the basis of authentic new ideas and innovation. As the last decade the processes of industry and manufacturing increases the efficiency through business process reengineering, efficiency and the effectiveness of economy of scale attain through use of electronic form like computers, with a big contribution of information and communication technologies. Since 1857 higher education in India follows the same old pattern and has therefore completed from several alternatives but it's a dead end, As the occupational nature changing constantly with

rapid developments in technology and science but the traditional structure and the patter of pharmaceutical education have no change practically, students do not have faith after completing education from the premier institutions for entering the practical and rational aspects of work. It has been an old belief the employer who principally take the lead on youth education in the country was the government. Industry sector as an agency for work generally overlook beyond the quality of academics like graduate, post-graduate. It is only in the old requirements such as Bachelor of pharmaceuticals, Master of Pharmaceuticals, Master of Science (Pharmaceuticals) and other competitive professional test along with the level of clearance at the higher educational level were the essential criteria for the introduction for employment as professors in universities and colleges as well as pharmaceutical organizations.

The un-believable reality as opportunities in majority employment is in pharmaceuticals company now are in the non-governmental sector and is very meticulous, and give opportunity to those who have practical exposure in pharmaceutical labs .There is a big difference in Government sector and the private sector, employs the professionals and students who possess skills and competencies required by it. Private pharmaceutical sector education requirement are in the pace of changing regularly because this sector has to make close watch of pace with other growing competitors, Pharmaceutical education now has to be custom-made to the requirements of the present contemporary demand in the market. Overseas institutions and the companies are preparing roads in the present pharmaceutical education by involving and learning the electronically digital versatile opportunities leading to give higher degrees of their universities. Foreign universities match with their certifications and degrees will be accepted by transnational's and global companies. Another big complexity of issues of higher pharmaceutical education has been destroyed by the public-private partnership in a big way setting up educational colleges and universities with the big agenda of minting money through admissions. From 2011 since the no. of deemed/private universities has been doubled

which are providing pharmaceutical professional education; with just the double increase in the student admission. Constitution of India passed resolutions and laws for setting up of non-govt. and deemed universities. Non-Govt. sector and deemed universities emerged in a huge way under the laws of Private University Acts, pharmaceutical education is also coming up with big pace. Vis a vies the conventional structure of pharmaceutical education in the govt. funded colleges and universities has continued to become obsolete with classroom teaching only, and also it is no-longer rational in quality of education in its relevant demand .There is a shortage of visiting faculty lectures, lab and library or infrastructure, and there is a less time also. Present paradigm of digital structures of learning are require in new education processes. In the present scenario, an obvious result is that the way of pharmaceutical higher studies seems to have reached dead- end, or we can say it is at verge of end. At the present hour it is pretty obvious to give a new look to the pharmaceutical education and introduces immediately the changes and will sum up the level of confidence in the ability of the govt.- run universities , competitive cost in education is also present dynamic era of present context. If old pattern working styles are not effective in the present context of the pharmaceutical education, than we must determine efficient ways of successfully accept the dynamic pattern. We have little choices but to do things in a different manner such as, Dynamic organizational structures are required to support changing paradigms of pharmaceutical learning processes with electronic digitalization.

II. OBJECTIVES

- a) To identify the flaws of current pharmaceutical education management in the era of digitalization.
- b) To understand the key issues in pharmaceutical education management in the era of digitalization.
- c) To outline the pedagogy adopted for improvement in pharmaceutical education in respect of digitalization.

III. RESEARCH METHODOLOGY

This paper is mainly at an exploratory level to determine idea of digitalization of present pharmaceutical education system .It also throws light on pedagogy adopted which can enhance the current pharmaceutical education management through digitalization.

A. Present Context:-

With the changing era of liberalization, privatization and globalization ,for remain competitive we need quality in all aspects, we need to sustain with quality manufacturing as

foreign manufactures who covers the Indian market with their complete list of products and services. Biggest factor to meeting the customer expectations as explained, meeting the competitive cost structure. Satisfaction of customer/consumer is must for enhancing quality parameters, in the present market without customer satisfaction, it's impossible to enhance market share in the present world. The professionals and customer of pharmaceutical digital education are students. There is a significant reduction in interest in general and old academic courses, and having a very negative effect in the universities and colleges. Dissatisfaction due to old method of education in country, Professionals and students who are seeking the present system of education diverted to the glamour and are joining other professional courses other than courses in general pharmaceutical degrees. As there is a big impression is professional pharmaceutical education courses, the other general education courses have failed to leap the way with changes that are taking place in the present world of work. Present courses offered by the general pharmaceutical education colleges are determined by old mindset and may be continued to remain rigid .Professional and Students keep on complaining that there is a very little choice in selecting is what the present context of study. Student and professionals expectation is that they need subjects which are practical and would suit there acumen skills and also achieve their future organizational needs with present context. Moreover the general idea is that pharmaceutical subjects and courses that are there at present are obsolete and not helpful to students and professionals in updating skills and abilities required by their future organization where they work. Professional satisfaction in students may have intangible factor for increasing the quality of pharmaceutical program of study. It will require the acceptance criteria of the group of learners by the digital system of pharmaceutical education. New combination of courses may have to be offered for students and professionals meeting variable learning requirements. Another driver for increasing the quality will be the commitment of educational professionals towards their students and to the excellence in knowledge system.

The importance of educational professional is to focus on the potential which is lying internally in the students and to enlighten of their mental capabilities. Another aspect which brings out the major need for change is the content and process of pharmaceutical education. It is unlike the recognition that present era of globalization when manufacturing of pharmaceuticals is the only means for minting money. In the present era of information technology it is the work which is knowledge based generates market share. Instead of large investments on capital of funds that was required for running a pharmaceutical manufacturing unit for production of goods at a cost competitive structure, knowledge

intensive pharmaceutical organization requires human capital of knowledge professionals only. Present era of information and digitalization, it is transforming the work we do. The brain of human can also use data and information and can store also. But brain has the perception of thinking, dynamic creativity and imagination also. The digital electronic computer can accommodate vast amount of pharmaceutical data but it cannot have the capacity to think and use. It may process the raw data and made useful information as per the commands given by the end user.

The various logics are the output of dynamic thinking of the human mind. Pioneer of nuclear physics Lord Rutherford, once said, “When he was told that America was going ahead in nuclear physics because they had a lot of money, Americans have money .We do not have it and so we have got to think.” No substitute for present difficult thinking; and with sustained effort able to go along with our minimal resources way even and capital. So , it’s an anarchy to use the human brain continue for remembering information when it can be used for solving typical problems, Thinking process – creative and dynamic, Dynamic skill contribute knowledge workers. That is why education system unless it is learner centered , and flexible, is developing around skills having thinking and is help to get professional and learners in acquiring the ability of understanding skills, Time to learn will gradually lose its application and relevance. It’s not surprising that now the professionals and students may select the regular and old courses offered by the colleges as their first option for education. Therefore, there is a growing demand to reorient the methodology of learning-teaching in the Indian universities to cope up with the requirements of the students and professionals for achieving success and contributing effectively and efficiently in the digital era of pharmaceutical industry.

The international outcomes of the digital information technology and its enormous possibilities in the field of pharmaceuticals are accepted widely and understood logically, by the newly admitted students and professionals. Not the least the core to make the most , we must also appreciate and acknowledge that there are present hindrances in front of the pharmaceutical education system particularly the above set of education system, and we also have significant choices to make. We must take the opportunity and to leave many behind. Must accelerate the powerful engine of prosperity and growth the world has ever seen, we better allows the engine of growth to stall. Last decades and trends have taught us we cannot have choices which are different in nature; Inaction or action makes the whole there is no presence of such opportunity as virtual. We unable to click and point our path to move for a future which is good than present. The pillars of

communication and Information technologies that are to be present offer themselves for paradigm shift as the pharmaceutical higher education needs for making relevant information of the present scenario of education. Further, each professional and student has to be stretch their knowledge mind to enabling a computer based information system and reach every journal, book ever written on the related topic of research. Also, the information which is produced is being generated, nearly in present time, is available made through on line with the World Wide Web. For the present time in our history, we made it positive, in other words, for a professional and student in our country to have access to the same knowledge world at the same instant as a pharmaceutical student professional in the most countries of the global world. The present scenario from old experience that un-uniformity in education increase the depth of unequal prospects of growth. Present dynamic information age may accelerate the trend perhaps .The fastest growing career perspective in the present context in the pharmaceutical education is research on drug based and computer related drug research modules, getting far more than the pay scales of other job works .Past trends taught us that even as new technologies generate growth prospects and opportunities, they can also increases economic in-equalities and enhance the acumen of social environment.

When we look into the digital technologyera, we feel same within our reach to ignore present developments .As we go further can fetch the prospects that are present technologies and can be use them to eliminate, not to look, disparities that present in the system. But till the every pharmaceutical student has a computer in the classroom/lab and an educated well trained professional to help, Every student until possess the skills to tap the enormous resources of the digital era, and also every big technology upgraded company can find skilled knowledge workers to fill its high-salaried portion, Our country will miss the full promise of the information age if we cannot allow the present professionals to update the opportunity to be missed .Every new day we have a face a challenge; and must decide how to face it. Professional and students deserves the chance to participate in the pharmaceutical digital conclave and the conferences. Right time has come for reconstituting the old curricular syllabus in pharmaceutical education. The present scope are there to introduce intra-disciplinary innovative pharmaceutical courses of studies in present scenario appropriate to present situations. If educational professionals continues to work in other way and concerns curriculum are managed by every institution in his own manner without knowing the benefit of mutual experience it may become a sports match in which goalpost is moving at a pace faster than the intellectual thoughts.

Conclusion will be that reaching the goal may forever remain unattained.

B. Prime-concerns

Few problems were found on the present context of present study, which is in the theme of “Digitalization of pharmaceutical higher education towards excellence” Digital technology and latest information is in learning and matching in administrative skills must learning through and teaching with present skills effective and efficient along with flexible based learning as we call collaborative learning.

C. Growth Plan

Growth plan restructuring pharmaceutical education for better prospects as follows: Digital literacy or computer based learning subjects is mandatory for all pharmaceutical courses offered as regular campus program or an distance education mode program .At present the access to the learning through compact discs and other digital based media programs be made available to all professionals and students. Collaborative development of educational professionals – learning modes. University and colleges to recognize and teaching- learning be made learner-centered with sovereignty of learners. Pharmaceutical courses are made customize capsule based and choices is made if possible to students, Qualitative part of courses to be taught by the educational professionals who are having exposure in industry and courses for development in skills to be taught by practicing professionals in manufacturing pharmaceutical industry, technical skill component be kept updated with the development of technology. Pharmaceutical Internship arrangements must be mandatory for all students with potential employers for getting the experience of On the Job trainee.

IV. CONCLUSION

India is a country well known for the quality of education and mind workers which recognize as a potential hub center for knowledge development in world. Population of India majority having the category of 0-35 year’s age group. Demographic profile of our country which is our biggest strength and the opportunity as well as present challenge for system in education, particularly the youth have to identify the pharmaceutical education system to solving in problems, Educationalist who are creative ,enabling also the learning habit for lifelong .Last but not the least, it may be highlighted that multi dimensions individual and social transformation ,social development, value acquisition , also been well identified in the present study. Following words are there to

summarize the multi dimensions which are considered most important indeed for going ahead into the present digital era of globalization. Indian pharmaceutical education should aim at producing students and professionals of values, knowledge, and must trained multi skills to achieve holistic excellence in there carrier and life. So let us make it crystal clear that we wish to prepare youth to march into the digital India of present era.

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