

Indigenous Health Care Products: A Step towards Self Reliant India

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Abstract:- India is considered as a hub for health care. Health sector of India has grown to a stage where we provide state of art health care not only to people of our country but also across the globe. With the health care industry growing at a rapid rate the central government of India has shown a keen interest in designing, manufacturing and marketing health care device's, equipment's and product's. The ambitious scheme the central government of India namely 'Atma Nirbhar Bharat' it's been a major boost to advance India's position in health care industry. As for the dentistry is concerned most of the products which are used in day-to-day practice are imported, which escalates the cost associated with dental treatment. From public health point of view indigenously manufactured health care products and equipment's is likely to reduce the expenses on health care. However, it is prudent to explore that the indigenously manufactured products and equipment's are of high standards with good clinical efficient. As public personal, research is warranted in this direction. To ensure that we have reached the stage where place our health in our own hands.

Keywords:- Atma Nirbhar Bharat Abiyan, Five Pillars, Sectors, Medical Product, Dental Product.

I. INTRODUCTION

Utmost of the developed countries in the World have been affected by the Pandemic, causing a massive reduction in transnational trade. Countries like China, America and Britain have entered a severe blow to their profitable growth. This is an awakening call for our country to be self-dependent to maintain a stable through thick and thin. The Government had taken a huge step in making India self-reliant. The citizens are encouraged to be possessors of their enterprises. Entrepreneurship is the only system becoming the backbone of a resilient economy. They have contributed to the growth of our economy towards the profitable.

Health care facilities in India had steadily grown to a stage to provide health care not only to people of our country but also across the Globe. With increasing costs of imported equipment, there is huge economy burden to people of our country. So there is a need for Indigenization of medical and dental devices^[1]. Indigenously manufactured health care products and equipment's is likely to reduce the expenses on health care^[2]. Government of India have various initiatives to strengthen this medical device manufacture with emphasis on research and development. India is fourth largest medical devices manufacturer in Asia^[3].

The ambitious scheme of Central Government of India is 'Atma Nirbhar Bharat'. This scheme has been a major boost to advance India's position in health care industry.

II. ATMA NIRBHAR BHARAT ABIYAAN

Government of India had developed a scheme called Atma Nirbhar Bharath. It was launched by PM Narendra Modi in May 2020. Vision of the scheme is to make our India a self-reliant.

The aim of this scheme is to reduce or stop the imports from foreign country and to promote indigenous product which should fulfill the criteria like high standards, cost effective, good efficient when comparing to that of imported products. The motto of Atma Nirbhar Bharath is "VOCAL FOR LOCAL WITH GLOBAL OUTREACH" by which encouraging the people to use the local made products^[4]

A. FIVE PILLARS

The scheme is built under five pillars- Economy, Infrastructure, System, Vibrant demography, Demand.

Government's is working towards building an economy that brings quantum jump rather than incremental change. The infrastructure should be world-class which becomes the identity of modern India. The third pillar is system. It should be no longer based on the rules and rituals

of the past but one that actualize the dreams of the 21st century. This system needs to be technology-based^[5].

The fourth pillar of this program considered as Demography. India's vibrant demography is the country's strength. It is the source of energy for a self-reliant India. The final pillar is the Demand. It is the cycle of demand and supply chain. It can boost our country economy and also the strength which needs to be harnessed to its full potential^[5]. In order to increase demand and to meet this demand of the products, every stake-holder should have sufficient raw materials to meet their demands and thus the supply chain will be empowered. Strengthening the supply chain with the smell of the soil and the sweat of our laborer's."^[6]

B. SECTORS AND ITS SCHEME

- *AGRICULTURE AND FORESTRY*
 - Promotion of herbal cultivation.
 - Financing facility under agricultural infrastructure fund.
- *BFSI- BANKING, FINTECH AND FINANCIAL SERVICES, INSURANCE*
 - Emergency credit line guarantee scheme.
 - International financial services centers authority
- *DEFENCE MANUFACTURING*
 - Defence acquisition procedure 2020.
 - Technology development fund scheme
- *FOOD PROCESSING*
 - Animal husbandry infrastructure development fund.
 - Subsidy for transportation of all fruits and vegetable.
- *PHARMACEUTICALS*
 - Promotion of domestic manufacturing of critical key starting materials.
 - Active pharmaceutical ingredients.
- *RETAIL AND E-COMMERCE*
 - PM SVANidhi scheme
- *MEDICAL DEVICES*
 - Promoting domestic manufacturing of medical devices^[6].

III. MEDICAL DEVICES

Medical devices are used in various purposes like screening, diagnosing, treatment, restoring the patient to normal lives, and also helps in improving quality of health care when compared to developed countries^[7].

A. The Various Categories Of Medical Devices

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- *Screening and diagnosis medical devices*
 - Electro-diagnostic apparatus: Electro-cardiographs, ultrasound, MRI, scintigraphic apparatus and other electro-diagnostic apparatus
 - Radiation apparatus: CT scanners, X-Ray
 - Imaging parts and accessories: Contrast media, medical X-Ray films (flat and rolled), X-Ray tubes and other imaging parts.
- *Surgical materials and equipment's*
 - Syringes, needles and catheters: syringes (with/without needles), tubular metal needles, needles for sutures, other needles, catheters, cannulae etc
 - Bandages and dressings: medical dressings (adhesive) and medical dressings (non-adhesive)
 - Suturing materials: all forms of suturing materials
 - Others: stents, blood-grouping reagents, first aid boxes and kits, ostomy products and surgical gloves

It is increasingly allowing elective but complex surgeries like knee replacement; to be shifted to outpatient / short stay at surgery centers.

➤ *Restoration*

Hospitals and physiotherapy-rehabilitative centers are now enabling patients to restore their health faster and return to normal productive lives through the use of advanced assistive and rehabilitative devices.

➤ *Self-monitoring devices*

Health screening devices are enabling patients to take charge of their own health at home.

B. Sub Segments And Product Categories.

- Ophthalmic Instruments: Instruments and appliances pertaining to ophthalmic use
- Medical and surgical sterilizers: All forms of medical and surgical sterilizers
- Dental products: Equipment (dental drills, dental chairs and dental X-Ray) and materials (dental cements, dental instruments and teeth and other fittings)
- Therapeutic appliances: Mechano-therapy apparatus and therapeutic respiration apparatus
- Other Instruments and Appliances: Blood pressure monitors, endoscopy apparatus, dialysis apparatus, transfusion apparatus, anesthetic apparatus and instruments, ultra-violet and infra-red ray.

IV. DENTAL PRODUCTS

Changing demographics India had led to growth along with fast urbanization of dental products industry. As optional income increases, dental care sector is gradationally increasing demand in Health Care system. An adding Geriatric population, changing cultures and private and public health care expenditure are fresh factors for growth of the dental care demand to them.

According to the Indian Dental Association (IDA) in 2016, India's population of 1.2 billion had access to 1,80,000 dentists, including 35,000 specialists in 2014. This number is projected to grow to 3,00,000 by 2018. Anticipated growth in the number of dental chains will increase the share of organized dental conventions across the country^[8].

There are various Indian dental products Manufacturing companies

- Suz-dent (India) Private Limited- Dental Chairs, Handpieces, compressor, autoclave
- Dispodent- Clinical accessories, disinfectant, disposables, instruments, dental uniforms, sterilizing equipments
- Pharmadent Remedies Pvt. Ltd - General dentistry, analgesic, anti-biotics, injectibles, dental specialities.
- Anand Mediproducts Pvt. Ltd- Dental laboratory equipment
- Denfort International- Dental chair, dental X Ray machine, dental operating microscope, autoclave, dental loupe, dental compressor and other dental equipment.

V. REGULATIONS

In June 2021, Quality Council of India (QCI) and Association of Indian Manufacturers of Medical Devices together started Indian Certification of Medical Devices (ICMED) which will enhance the high standards, safety, and clinical efficiency of indigenous manufactured devices.^[9]

VI. SIGNIFICANCE

Manufacture of Indigenous medical products with high standards and cost effectively.

Boost up revenue of our Nation, promotes employment and India to attain the Global footprint in the manufacturing field.

VII. CHALLENGES

There are many challenges in attaining self-reliant which include lack of awareness among stockholders, regulatory compliance, lack of research and development in the field of manufacturing, lack of manufacturers. With overcoming of these challenges there could create more opportunity in various areas like research and development, manufacturing, development of local manufacturers, increase supply chain and increase exports.^[10]

VIII. CONCLUSION

Industry needs to align with the Government initiatives to fully realize the potential of making indigenous product tagged Made in India. This makes our nation proud and step up in the field of production. While most initiatives have to be undertaken by medical devices manufacturers (both MNC and Indian companies), other key stakeholders (healthcare providers and health insurers) have an equally important role in facilitating the initiative. empowering the progress of a developing nation like India and keeping moving in this

trajectory, keeping it self-motivating and fueling itself through these endeavors.

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