Health

1 Introduction

The WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The determinants of good health are: access to various types of health services, and an individual's lifestyle choices, personal, family and social relationships.

At present, India's health care system consists of a mix of public and private sector providers of health services. Networks of health care facilities at the primary, secondary and tertiary level, run mainly by State Governments, provide free or very low cost medical services. There is also an extensive private health care sector, covering the entire spectrum from individual doctors and their clinics, to general hospitals and super speciality hospitals.

2 Weaknesses in our Present Health System

- Inadequate availability of health care services including both public and private:
  - There are 45 doctors/lakh populations while desirable number is 85.
  - There are 75 nurses/lakh populations while desired number is 255.
  - There are geographical variations in availability of health services
- Quality of health care services:
  - The Regulatory standards for public and private are not adequately defined and ineffectively enforced.
- Majority of the population faces problem in affording health care especially in tertiary care.
- Amidst all this, health care costs are expected to rise as:
  - With rising life expectancy, a larger proportion of our population will become vulnerable to chronic Non Communicable Diseases (NCDs).
- Public expenditure on health care in India is very low (1.3% of GDP).

3 12th Plan Strategy for Health

The Twelfth Plan seeks to expand the reach of health care and work towards the long term objective of establishing a system of Universal Health Coverage (UHC) in the country i.e. each individual would have assured access to a defined essential range of medicines and treatment at an affordable price, which should be entirely free for a large percentage of the population.

The key elements of the strategy to be followed are:

- Substantial expansion and strengthening of the public sector health care system in order to meet the health needs of rural and even urban areas. As supply in the public sector increases, it will cause a shift towards public sector providers freeing the vulnerable population from dependence on high cost and often unreachable private sector health care.

- The expenditure on health as a percentage of GDP for the health sector related resources needs to be increased to 2.5 per cent by the end of the Twelfth Plan.
- Financial and managerial systems will be redesigned to ensure more efficient utilisation of available resources, and to achieve better health outcomes.
- Efforts would be made to find a workable way of encouraging cooperation between the public and private sector in achieving health goals.
- The present Rashtriya Swasthya Bima Yojana (RSBY) which provides 'cash less' in-patient treatment for eligible beneficiaries through an insurance based system will need to be reformed to enable access to a continuum of comprehensive primary, secondary and tertiary care.
- A large expansion of medical schools, nursing colleges, and so on, is necessary to ensure availability of skilled human resources and public sector medical schools must play a major role in the process.
- A series of prescription drugs reforms, promotion of essential, generic medicines, and making these universally available free of cost to all patients in public facilities as a part of the Essential Health Package will be a priority.
- Effective regulation in medical practice, public health, food and drugs is essential to safeguard people against risks, and unethical practices.

4 Inclusive Agenda for Health

In order to ensure health services with special attention to the needs of marginalised sections of the population the following will be emphasised in the Twelfth Plan:

- Access to services: Barriers to access would be recognised and overcome especially for the disadvantaged and people located far from facilities. Medical and public health facilities would be accessible to the differently-abled. They would be gender sensitive and child friendly.
- Special services: Special services should be made available for the vulnerable and disadvantaged groups. For example, counselling of victims of mental trauma in areas of conflict.
- Monitoring and evaluation systems: Routine monitoring and concurrent impact evaluations should collect disaggregated information on disadvantaged segments of the population.
- Representation in community fora: Wherever community-level fora exist or are being planned for, such as Rogi Kalyan Samitis, VHSNC, representation of the marginalised should be mandatory. Also, every Village Health Sanitation and Nutrition Committee would strive to have 50 per cent representation of women.
- Training: Training of health and rehabilitation professionals should incorporate knowledge of disability rights, as also the skills to deal with differences in perspectives and expectations between members of disadvantaged segments and the general population that may arise out of different experiences.

Monitorable national targets for 12th plan in health sector

1. Reduce IMR to 25 and MMR to 1 per 1,000 live births, and improve Child Sex Ratio (0–6 years) to 950 by the end of the Twelfth FYP.
2. Reduce Total Fertility Rate to 2.1 by the end of Twelfth FYP.
3. Reduce under-nutrition among children aged 0–3 years to half of the NFHS-3 levels by the end of Twelfth FYP.

5 Universal Health Coverage

Universal health coverage include the following components:

- To ensure health services for all Indian citizens in any part of the country, regardless of income level, social status, gender, caste or religion
- Health services must be affordable, accountable and of high quality
- UHC also should be Promotive, preventive, curative and rehabilitative
- services should address the wider determinants of health delivered to individuals and populations
- Government must the guarantor and enabler, although not necessarily the only provider of health and related services

UHC must meet the objectives of improving coverage, expanding access, controlling cost, raising quality, and strengthening accountability. Challenges to achieve UHC are:

- Public sector is severely underfunded.
- Private sector is growing but their rising high cost healthcare service is problematic.
- Our country is also facing serious issues of inadequate quality and coverage.
- Ineffective regulation is a concerned area.
- Combining public and private providers effectively for meeting UHC goals in a manner that avoids perverse incentives, reduces provider induced demand.
- Integrating different types and levels of services—public health and clinical; preventive and promotive interventions along with primary, secondary, and tertiary clinical care.

5.1 High Level Expert Group on Universal Health Coverage

The High Level Expert Group (HLEG) was set up by the Planning Commission to define a comprehensive strategy for health for the Twelfth Five Year Plan. The main recommendations of the HLEG are:

- Health Financing and Financial Protection:
  - Government should increase public expenditure on health from the current 1.2% of GDP to at least 3% of GDP by 2022.
- Expenditures on primary healthcare should account for at least 70 per cent of all healthcare expenditure.
- General taxation should be used as the principal source of healthcare financing, not levying sector specific taxes.
- Specific purpose transfers should be introduced to equalize the levels of per capita public spending on health across different states.
- Access to Medicines, Vaccines and Technology:
  - Price controls and price regulation, especially on essential drugs, should be enforced.
  - The Essential Drugs List should be revised and expanded, and rational use of drugs ensured.
  - Public sector should be strengthened to protect the capacity of domestic drug and vaccines industry to meet national needs.
  - Safeguards provided by Indian patents law and the TRIPS Agreement against the country's ability to produce essential drugs should be protected.
- Human Resources for Health:
  - Institutes of Family Welfare should be strengthened.
  - Regional Faculty Development Centers should be selectively developed to enhance the availability of adequately trained faculty and faculty-sharing across institutions.
  - District Health Knowledge Institutes, a dedicated training system for Community Health Workers, State Health Science Universities and a National Council for Human Resources in Health (NCHRH) should be established.
- Health Service Norms:
  - A National Health Package should be developed that offers, as part of the entitlement of every citizen, essential health services at different levels of the healthcare delivery system.

- Equitable access to health facilities in urban areas by rationalizing services and focusing particularly on the health needs of the urban poor.

- Management and Institutional Reforms:
  - All India and State level Public Health Service Cadres and a specialized State level Health Systems Management Cadre should be introduced in order to give greater attention to Public Health.
  - The establishment of a National Health Regulatory and Development Authority, National Drug Regulatory and Development Authority, and National Health Promotion and Protection Trust (NHPPT) is also recommended.
- Community Participation and Citizen Engagement:
  - Existing Village Health Committees should be transformed into participatory Health Councils.
- Gender and Health:
  - There is a need to improve access to health services for women, girls and other vulnerable genders which goes beyond the maternal and child health.

Taking insights from countries that have attempted towards UHC following path can be adopted:

- A mix of public and private services is the reality of most countries. A strong regulatory framework is essential to ensure that the UHC programme is most effective in controlling cost, reducing provider induced demand, and ensuring quality.
- There is a need to build up institutions of citizens' participation, in order to strengthen accountability and complement what the regulatory architecture seeks to do.
- The need is first to strengthen our public health infrastructure at all levels. It could be supplemented by private service providers as well as Public Private Partnerships (PPPs).
- For UHC, access to services that are determinants of health, such as safe drinking water and sanitation, wholesome nutrition, basic education, safe housing and hygienic environment are of utmost importance.

5.2 UHC Model

- Frame a national, core Essential Health Package (EHP) for out-patient and in-patient care for uniform adoption in pilot projects.
- Rashtriya Swasthya Bima Yojana (RSBY) can be expanded into an EHP.
- The Primary Health Care should be strengthened to deliver both preventive, public health and curative, clinical services.
- Cashless delivery of an Essential Health Package (EHP) to all ought to be the basic deliverable in all models.
- Full and free access to essential generic medicines, through linkages with Government pharmacies.
- A robust and effective Health Management Information System is required which would enable assessment of performance and help in allocating resources to facilities
- Frame and ensure compliance with Standard Treatment and Referral Guidelines
- Build an effective system of community involvement in planning, management, oversight and accountability.
- Develop and strengthen Monitoring and Independent Evaluation Mechanisms.
- State governments should consider experimenting with arrangements where the state and district purchase care from an integrated network of combined primary, secondary and tertiary care providers.

6 National Health Mission

After the success of the National Rural health Mission, the National Health Mission (NHM) was announced in 2012 covering all the villages and towns in the country. The National Health mission has two sub-missions:

1. National Rural Health Mission
2. National Urban Health Mission

The core principles of NHM are:

- Universal Coverage
  - The NHM shall extend all over the country, both in urban and rural areas and promote universal access to a continuum of cashless, health services from primary to tertiary care.
- Achieving Quality Standards
  - Standards would include the complete range of conditions, covering emergency, RCH, prevention and management of Communicable and Non-Communicable diseases incorporating essential medicines, and Essential and Emergency Surgical Care (EESC).
  - The objective would be to achieve a minimum norm of 500 beds per 10 lakh population in an average district.
  - For ensuring access to health care among under-served populations, the existing Mobile Medical units would be expanded to have a presence in each CHC.
- Continuum of Care
  - The linkages between different health facilities would be built so that all health care facilities in a region are organically linked with each other, with medical colleges providing the broad vision, leadership and opportunities for skill up-gradation.
  - The potential offered by tele-medicine for remote diagnostics, monitoring and case management needs to be fully realised.
- Decentralised Planning
  - A key element of the new NHM is that it would provide considerable flexibility to States and Districts to plan for measures to promote health and address the health problems that they face.
  - New health facilities would not be set up on a rigid, population based norm, but would aim to be accessible to populations in remote locations and within a defined time period.

Outcomes for NHM in the 12th Plan are synonymous with those of the 12th Plan, and are part of the overall vision. The endeavor would be to ensure achievement of these indicators. The indicators are:

1. Reduce MMR to 1/1000 live births
2. Reduce IMR to 25/1000 live births
3. Reduce TFR to 2.1
4. Prevention and reduction of anaemia in women aged 15–49 years
5. Prevent and reduce mortality & morbidity from communicable, non-communicable; injuries and emerging diseases
6. Reduce household out-of-pocket expenditure on total health care expenditure
7. Reduce annual incidence and mortality from Tuberculosis by half
8. Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts
9. Annual Malaria Incidence to be <1/1000
10. Less than 1 per cent microfilaria prevalence in all districts
11. Kala-azar Elimination by 2015, <1 case per 10000 population in all blocks

6.1 National Rural Health Mission

The National Rural Health Mission (NRHM) was launched in 2005, to provide accessible, affordable and quality health care to the rural population, especially the vulnerable groups. From 2013, NRHM is being implemented as a sub mission under the National Health Mission.

The thrust of the mission is on establishing a fully functional, community owned, decentralized health delivery system with inter-sectoral convergence at all levels, to ensure simultaneous action on a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality.

6.2 National Urban Health Mission

The National Urban Health Mission (NUHM) as a sub-mission of National Health Mission (NHM) was approved by the Cabinet in 2013.

NUHM envisages to meet health care needs of the urban population with the focus on urban poor, by making available to them essential primary health care services and reducing their out of pocket expenses for treatment.

NUHM would endeavour to achieve its goal through:

- Need based city specific urban health care system to meet the diverse health care needs of the urban poor and other vulnerable sections.
- Institutional mechanism and management systems to meet the health-related challenges of a rapidly growing urban population.
- Partnership with community and local bodies for a more proactive involvement in planning, implementation, and monitoring of health activities.
- Availability of resources for providing essential primary health care to urban poor.
- Partnerships with NGOs, for profit and not for profit health service providers and other stakeholders.

NUHM would cover all State capitals, district headquarters and cities/towns with a population of more than 50000. It would primarily focus on slum dwellers and other marginalized groups like rickshaw pullers, street vendors, railway and bus station coolies, homeless people, street children, construction site workers.

7 Rashtriya Swasthya Bima Yojana (RSBY)

The 'Rashtriya Swasthya Bima Yojana' (RSBY), introduced in 2007, was designed to meet the health insurance needs of the poor.

- RSBY provides for 'cash-less', smart card based health insurance cover of `30,000 per annum to each enrolled family, comprising up to five individuals.
- The beneficiary family pays only `30 per annum as registration/renewal fee.
- The scheme covers hospitalisation expenses (Out-patient expenses are not covered), including maternity benefit, and pre-existing diseases.
- A transportation cost of `100 per visit is also paid.
- RSBY was originally limited to Below Poverty Line (BPL) families but was later extended to building and other construction workers, MGNREGA beneficiaries, street vendors, beedi workers, and domestic workers.
- Key feature of RSBY is that it provides for private health service providers to be included in the system, if they meet certain standards and agree to provide cash-less treatment which is reimbursed by the insurance company.
- The shortcomings of RSBY noted so far include high transaction costs due to insurance intermediaries, inability to control provider induced demand, and lack of coverage for primary health and out-patient care.
- The RSBY also does not take into account state specific variations in disease profiles and health needs.

8 AYUSH

AYUSH is the non-allopathic medical systems in India comprising of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy.

Benefits of AYUSH system are:

- It addresses gaps in health services.
- It provides low cost services in far-flung areas.
- AYUSH can provide best care to elderly.
- Problem of tobacco and drug abuse can be tackled by AYUSH especially through Yoga.
- Useful in lifestyle diseases like diabetes and hypertension.
- Large part of the population prefers AYUSH as it is perceived to have lower side effects, costs and considerations of it being more natural.

Challenges in the present system are:

- Quality standards of Medicines – Scientific validation of AYUSH has not progressed in spite of dedicated expenditure in past.
- Lack of human resources – Practitioners are moving away from traditional system for better opportunities
- The existing infrastructure remains under-utilized.

Some of the suggestions to completely utilize the benefits of AYUSH system are:

- Research and Development
  - More research is required to validate AYUSH therapies
  - Cross-disciplinary research with other disciplines will ensure best health practices.
  - Standard Treatment Guidelines and a Model Drugs List of AYUSH drugs for community health workers should be developed.
  - Quality certification of raw materials is required.
  - All education programmes taught in colleges and universities related to AYUSH must be accredited.
- Regulatory framework
  - All Government health care facilities should offer suitable AYUSH services as per laid down standards.
  - Mandated representation of AYUSH experts at all levels for regulatory framework is important.
  - A separate Central Drug Controller for AYUSH drugs and strengthening of quality enforcement mechanism in the States should be established.
  - Community-based AYUSH interventions for preventive and promotive healthcare are required.
- Human resources development
  - Cross-disciplinary learning between modern and AYUSH systems at the post-graduate level.
  - Modification in syllabi at the undergraduate level should be worked by a team of experts from the different Professional Councils.
  - Collaboration between AYUSH teaching colleges and with medical colleges for mutual learning should be encouraged.
  - AYUSH graduates should be legally empowered to practice as Primary Health care physicians
- Concept of AYUSH Gram: One village per block can be selected for implementation of integrated primary care protocols of AYUSH and modern system of medicine. Following should be implemented in these villages:
  - Herbal medicinal gardens
  - Regular Yoga camps should be organized preferably through PRI institutions.
  - Basic knowledge on hygiene, promotion of health and prevention of diseases.
- A mainstreaming of AYUSH mission into National health mission is required.
- Information and Communication technology can be used to share information about AYUSH across all parts of country.

9 Hidden Hunger

Hidden hunger is also known as micronutrient deficiency. It is a form of under nutrition that occurs when intake or absorption of Vitamins, Proteins and Mineral is too low to sustain good health and development in children & normal physical and mental functions in adults.

SELECTED MICRONUTRIENT DEFICIENCIES AND THEIR EFFECTS

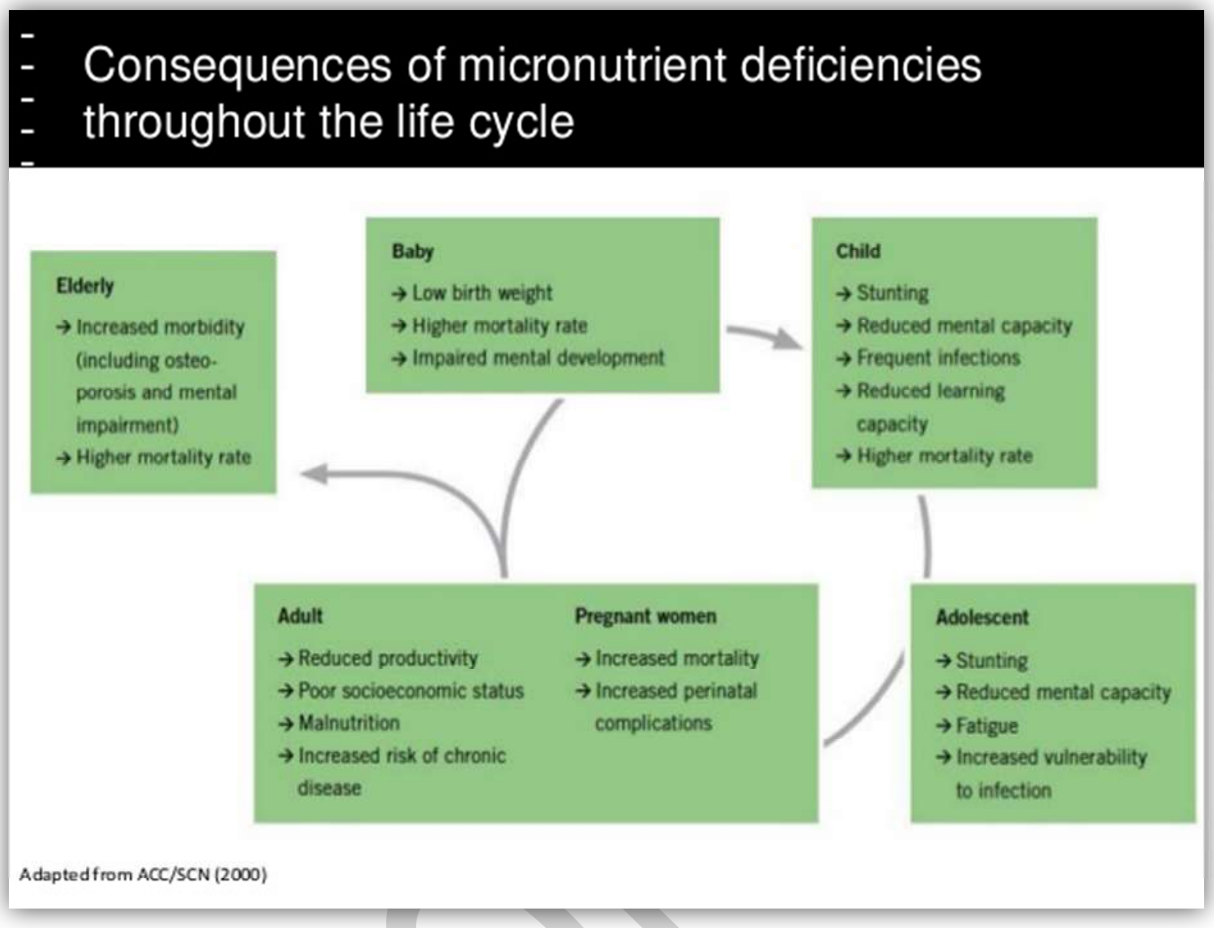
Micronutrient deficiency	Effects include	Number of people affected
Iodine	Brain damage in newborns, reduced mental capacity, goiter	~1.8 billion
Iron	Anemia, impaired motor and cognitive development, increased risk of maternal mortality, premature births, low birthweight, low energy	~1.6 billion
Vitamin A	Severe visual impairment, blindness, increased risk of severe illness and death from common infections such as diarrhea and measles in preschool age children; (in pregnant women) night blindness, increased risk of death	190 million preschool age children; 19 million pregnant women
Zinc	Weakened immune system, more frequent infections, stunting	1.2 billion

Sources: Allen (2001); Andersson, Karumbunathan, and Zimmermann (2012); de Benoist et al. (2008); Micronutrient Initiative (2009); Wessels and Brown (2012); and WHO (2009; 2014a).

According to Global Hunger Index report 2014, the challenge of malnutrition is not just one of lack of food (hunger) but also of micro-nutrients (hidden hunger) and these two problems are not unrelated.

- The report questions the overall benefits of green revolution in India, due to which the staple cereals became more affordable and part of dietary cycle, making micronutrients rich foods costly and unaffordable to consume.
- The report has recommended dietary diversity as the most effective way of preventing hidden hunger, which entails a return to the traditional foods and fruits and vegetables sourced from kitchen gardens, which people in developing economies are abandoning.
- The report points to threats to traditional diets in rural areas of India, which included all types of millets, pulses, oilseeds and local seasonal vegetables and fruits but are disappearing from the plates and are being increasingly replaced by government-subsidized rice and wheat, supplied through public distribution system (PDS).

However, in the last 10 years there has been lot of improvements in government schemes. A massive expansion in ICDS and PDS under the National food security act and inclusion of pulses and cooking oils in food baskets in many states are good signs to improve micro-nutrient deficiency.



9.1 Challenges in Reducing Hidden Hunger

- There are huge gaps in implementation of the programmes like ICDS, PDS, and Food Security, e.g., there is a massive shortage of paediatric iron syrups for children in most states which need to be corrected.
- Universal maternity entitlements have been promised under NFSA, but there is no sign of it actually being implemented.
- We don't have the latest data which show the current level of mal-nutrition and this is a serious gap in the efforts of tackling malnutrition. The latest available nationally representative data is of 2005-06.

9.2 Suggestions to Improve the Current Situation

- There are already institutional supports present in the form of Sarv Siksha Abhiyan, Midday Meal Scheme, National Rural health mission to tackle hidden hunger, we need to strengthen them.
- Weekly Iron Folic acids supplementation to reduce anemia among girls is a good step to tackle hidden hunger.
- India has a universal supplementation programmes for Iron and Vitamin A.
- Also, in order to combat widespread deficiencies in iron, India is promoting iron rich crops such as pearl millet, which is high in vitamin B, calcium, iron, potassium, magnesium and zinc.
- Innovative agricultural processes like fortification and biofortification aiming at improving the specific micronutrient deficiencies of a target population should be promoted.
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Food fortification and Bio-fortification

- Food fortification or enrichment is the process of adding micronutrients (essential trace elements and vitamins) to food. Addition of micronutrients to staples and condiments can prevent large-scale deficiency diseases.
- Biofortification is the idea of breeding crops to increase their nutritional value. This can be done either through conventional selective breeding, or through genetic engineering.
- Biofortification differs from ordinary fortification as it focuses on making plant foods more nutritious as the plants are growing, rather than having nutrients added to the foods when they are being processed.

10 Sterilization

Recently in Chhattisgarh, in a family planning camp, 11 women died after sterilization surgeries. This unfortunate incident echo similar episodes from other parts of the country in the past.

It points towards lacunae in the formulation and implementation of family planning initiatives in India which is marred by gender bias, lack of choice and information as well as medical negligence due to target based approach and mass-camps.

10.1 Key Areas of Concern

- Sterilization, particularly tubectomy, has been vigorously promoted and pushed by the government through centrally- decided targets and on a mass scale through a camp approach, largely disregarding other currently available methods such as Condoms, oral pills, IUDs.
- Weak public health infrastructure and severe lack of trained medical staff results into untrained persons/doctors performing complicated surgeries in Hospitals.
- Lack of awareness and education makes the situation acute in states like Chhattisgarh.
- Gender Bias: India's family planning programmes have been traditionally focused on women thus indicating gender bias in the implementation of such initiatives.
- Women are not informed about their choices. Some experts blame the incentive payments for leading health authorities to pressure patients into surgery rather than advising them on other forms of contraception.
- The incident also raised concern over supply of adulterated or fake drugs and unhygienic conditions.

10.2 Some Suggestions to Tackle the Issue

The situation need urgent corrective steps to make family planning initiatives safe and effective:

- Family planning must shift from target-based approaches to demand driven and voluntary contraception. This would also be in consonance with the National Population Policy of 2000.
- Family planning services should be carried out at government facilities by trained doctors and support staff with strict adherence to standard protocols and quality assurance guidelines.
- Public health centers should be strengthened and equipped to provide regular services based on demand.
- In order to minimize gender bias, government should prioritize training for male government workers to provide men with information and counseling about contraceptive choices.
- Spacing methods like oral pills, condoms, IUDs need to be promoted for informed choices.
- Government should strengthen the drug procurement policy and ensure that the quality of drugs is regularly monitored for efficacy, toxicity, lethality and composition.

11 Medical Tourism

Medical tourism is the travel of people to another country for the purpose of obtaining medical treatment in that country. Traditionally, people travel from less developed countries to major medical centers in highly developed countries for medical treatment that is unavailable in their country.

The recent trend is for people to travel from developed countries to third world countries for medical treatments because of cost consideration. Another reason for travel for medical treatment is because some treatments may not be legal in the home country, such as some fertility procedures.

Medical tourism is a growing sector in India. India's medical tourism sector is expected to experience an annual growth rate of 30%, making it a $2 billion industry by 2015. An estimated 150,000 of these travel to India for low-priced healthcare procedures every year.

11.1 Reasons for Growth of Medical Tourism in India

- Reduced costs: Most estimates claim big surgery treatment costs in India start at around a tenth of the price of comparable treatment in USA or Britain.
- Availability of latest medical technologies.
- A growing compliance on international quality standards.
- Foreigners are less likely to face a language barrier in India.

The most popular treatments sought in India by medical tourists are alternative medicine, bone-marrow transplant, cardiac bypass, eye surgery, hip replacement and heart surgery.

11.2 Steps taken by the Government

- The government has removed visa restrictions on tourist visas that required a two-month gap between consecutive visits for people from Gulf countries which is likely to boost medical tourism.
- A visa-on-arrival scheme for tourists from select countries has been instituted which allows foreign nationals to stay in India for 30 days for medical reasons.
- A number of hospitals are hiring language translators to make patients more comfortable while at the same time helping in the facilitation of their treatment.

12 Commercial Surrogacy

Surrogacy is an arrangement between a woman and a couple or individual to carry and deliver a baby. Women or couples who choose surrogacy often do so because they are unable to conceive due various reasons.

In past it was generally confined to close relatives or friends in altruistic mode but with growing demands payment of money to surrogate mothers have become a norm which is known as commercial surrogacy.

India is a main destination for surrogacy and Indian surrogates have been increasingly popular with intended parents in industrialized nations because of the relatively low cost and flexible laws.

12.1 Issues in Surrogacy

In 2008, the Supreme Court of India in the Manji's case (Japanese Baby) has held that commercial surrogacy is permitted in India. However the practice of surrogacy raises many social and ethical questions:

- Due to lack of proper legislation both surrogate mothers and intended parents are exploited by the middlemen and commercial agencies.
- There is no transparency in the whole system and the chance of getting involved in legal problems is there due to unpredictable regulation governing surrogacy in India.

- The cross border surrogacy leads to problems in citizenship, nationality, parentage and rights of a child. There are occasions where children are denied nationality of the country of intended parents and this result in a long legal battle e.g. the case of German couple in 2014.
- The poor illiterate women of rural background are often persuaded in such deals by their spouse or middlemen for earning easy money. These women have generally no saying and no right on decision regarding their own body and life.
- In case of unfavorable outcome of pregnancy, they are unlikely to be paid and there is no provision of insurance or post pregnancy medical and psychiatric support for them.
- Gender selectiveness: Girl child is not preferred by many and this leads to female foeticide.

In this context a draft 'assisted reproductive technologies (regulation) bill 2013, is long awaited step towards regulation. However there are few concerns with the bill:

- There is no stipulation on the number of times an intending couple or individual can make use of surrogacy.
- There is no maximum age limit prescribed under the bill for the couples or individual to make use of ART. The minimum age is 21.
- There is no screening of the socio-economic and family background of the couples.
- The bill prohibits sex selective surrogacy with the pre-conception and pre-natal diagnostic techniques but during the pregnancy there is no means to check if the clinics are complying with the same.
- Further there is no effective body to oversee the conduct and operation of clinics.

These concerns should be resolved before this draft bill becomes an act.

13 Tax on Tobacco

The most effective approach to controlling the spread of tobacco use is through policies that directly reduce the demand for it. There are many valuable ways of going about this, from advertising bans to public smoking prohibitions, but the most potent and cost-effective option for governments everywhere is the simple elevation of tobacco prices by use of consumption taxes.

Evidence from countries of all income levels shows that price increases on cigarettes are highly effective in reducing demand. Higher prices induce cessation and prevent initiation of tobacco use. They also reduce relapse among those who have quit and reduce consumption among continuing users.

Over 120 million Indians smoke, and 10% of the world's tobacco smokers live in India. India has the second largest group of smokers in the world after China. Studies of price elasticities in India find that a 10% increase in tobacco prices is estimated to reduce bidi consumption by 9.1 % and cigarette consumption by 2.6%.

13.1 Problems with Tobacco Taxation Regime in India

- The tax hikes on smoking tobacco in 2014 though appear large in the aggregate, but have little effect on the price of single cigarette sticks, a popular mode of retail in India. It is argued that taxes can and must go higher to ensure substantial increases in single cigarette stick prices.
- Bidis are the most popular tobacco product used in India and are very cheap in India—an average pack of bidis costs only Rs 4. Taxes on bidis are very low, averaging only 9% of retail price.
- Historically, taxes have been low for beedis compared with other tobacco products. Handmade beedis are taxed just Rs.14 per 1,000 sticks, machine-made ones are taxed Rs.30 per 1,000 beedis.
- In the case of cigarettes, unlike the system followed abroad, the taxation in India is based on the length of the cigarette. Cigarettes of various lengths are taxed at different specific rates. As a result, longer cigarettes attract the most tax. This taxation structure encourages a company to manufacture cigarettes of varying lengths.
- Also, the tax on cigarettes is about 43 per cent of the retail price. This is way below the WHO's recommended excise duty of 70 per cent of the retail price.

- Tobacco taxes in India are not regularly adjusted for inflation, and over time tobacco products are becoming increasingly affordable.

13.2 Some Suggestions to Tackle the Situation

- Increase bidi taxes substantially: Increasing bidi taxes from Rs 14 to Rs 98 per 1000 bidis (from 9% to 40% of retail price) will increase government revenue and will also decrease the number of smokers.
- Tighten policies regulating bidi production: Eliminating the small producer exemption or limiting it to truly small companies, prohibiting the sale of unbranded bidis, and mandated reporting of bidi tobacco sales and purchases will ensure higher tax compliance.
- Increase cigarette taxes substantially: Taxes on cigarettes must be increased to ensure substantial increases in single cigarette stick prices.
- Simplify, extend and strengthen tobacco taxation: The current tax system is complex. Simplifying the tax system by reducing differential taxes across products will help covey a clear message that all tobacco products are harmful. Regular adjustments of tobacco taxes to account for inflation would help ensure high relative prices across tobacco products.

14 Tax on Fat

A fat tax is a tax or surcharge that is placed upon fattening food, beverages or on overweight individuals. It aims to discourage unhealthy diets and offset the economic costs of obesity.

- Numerous studies suggest that as the price of a food decreases, obesity of population increases and also eating behavior may be more responsive to price increases than to nutritional education.
- A European Commission report found that specific taxes on sugar, salt or fat do cause reductions in consumption but higher taxes may also merely encourage consumers to go for cheaper products.
- However, there is also evidence that obese individuals are less responsive to changes in the price of food than normal-weight individuals.
- A lot of people argue that the government has no right in imposing a tax like this one on its people however to tackle obesity and related diseases such taxation is required.
- However this must be done with care, because a carelessly chosen food tax can have surprising and perverse effects.
- For example, In October 2011, Denmark introduced a fat tax on butter, milk, cheese, pizza, meat, oil and processed food. In November 2012, the Danish Tax Ministry abolished the fat tax stating that it failed to change Danes' eating habits, and encouraged cross border trading, put Danish jobs at risk and had been a bureaucratic nightmare for producers and outlets. The proposed sugar tax plans were also scrapped.
- The precise impact of "fat taxes" on the competitiveness of the agriculture and food sector still needs to be studied in detail and the ways to tackle its negative impacts.