e – HEALTH INITIATIVES OF AP – AN OVERVIEW IN AYUSH

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INTRODUCTION

India is a subcontinent with various geographical and ecological conditions and people with various traditions and customs.

• Health plays a major important role in the life of an individual.

• The famous Gnome “Arogyame mahaabhagyam” (Health is Wealth) reveals it.
For any individual to be happy, good health is a mandatory requisite because only a healthy human being is able to fulfill his/her worldly responsibilities with ease.

“Dharmaartha kaama mokshaanam arogyam moolamuttam Rogastasyaapa hartaraha sreyaha so jeevitasya cha”

..... are possible only through good health. Health is the keystep for every growth and success. Only a healthy body can serve the Nation.
• Thus for maintenance of the proper health –
  Dinacharya (Daily regimen)
  Ritucharya (Seasonal regimen)
  Aahara (Food consumption)
  Vihara (Life style) plays a major role.

• Health is given much more importance by both
  Central and State Governments and many
  programmes are being implemented for the
  maintenance of health.

• Health means not only the physical health but also
  the mental and spiritual wellbeing of an individual
  in a good and healthy environment.
• e-Health – means
  Health care practice supported by electronic processes and communication.
  Utility of Electronic/digital processes in health care.
  Health care practice using the internet.
  m-health – health applications and links on mobile phones.

• According to WHO – e health is the use of information and communication technologies (ICT) for health maintenance.
• Purpose:

To develop and drive the implementation of a common set of principles, policies and best practices for improving quality, safety and efficiency of healthcare through information and Information technology (IT).

Eg: Treating patients, conducting research, educating health work force, tracking diseases and monitoring public health and m-health (through mobile technologies).
• Health & e-health initiatives – Development
Gurusishya parampara & Folklore

Manuscripts

Publication of books

Digitalization
• Gurusishya parampara & Folklore

• Gurusishya parampara: Transfer of knowledge from one generation to another generation, orally from the gurus / succession of teachers and disciples.

• Folklore: Transfer of knowledge from elders to youngers in some groups (Tribals) (Vamsapaaramparya)
• Manuscripts:
  Manuscripts are the original texts/scripts that are manually written.
• These are the proofs of our well developed ancient sciences.
• Types: Talapatras, Bhurja patras
  Kaasta phalakas
  Tamra phalakas
  Silaa phalakas
  Mrittika phalakas
• Publication of books

• Later on books are published through printing machines.

• Gaining of knowledge to many people became easy by reading the books. Pictures also added to them.

• For those who are having minimum education also enabled to read the books and help to follow the principles useful for good health maintenance.
Digitalization:

Digitalization is the integration of digital technologies into everyday life by the digitization of every thing that can be digitized.

Digitization – Digitalization

Uses in health care:

Continuous extension of services
Improving the patient care
EMR maintenance
Security of the data collected
Telemedicine
Telemedicine

- Higher quality of life
  - Improved compliance
  - Changing of lifestyle
  - Acceptance of the disease
- Higher quality of care
  - Security QOL
  - Therapy guidance and control
  - Budget relief and optimized time management
- Disease management RSA
- Reduced periods of hospitalization
- Transparency of costs and services (Quality Assurance)
- Lower medication costs
- Optimization of therapy using guidelines

Patient
- Physician

Cost bearer

- Higher cost efficiency
Example: Interactive telemedicine

- **Syncronous communication**

  - **No Internet access:**
    - Cellphone
  - **With Internet access:**
    - Internet telephony (skype, whatsapp)
    - Video conferencing
• NeHA: Formation

• The NKC (National knowledge commission) had recommended the formation of NHIA (National Health Information Authority) to support implementation on e-health in the year 2008.

• As a part of the Govt Digital India programme, a set of online health care services are scheduled in the year 2014 and the Govt of India had set up a National e health authority (NeHA) for –
  Standardisation
  Storage and
  Exchange of electronic health records of patients in a cost effective & secured manner.
• NeHA is a proposed regulatory body, the main aim being digitalization of health information.

• NeHA is a nodal authority and will be responsible for the development of an Integrated Health Information System in India.

• NeHA will be responsible for enforcing the laws and regulations relating to the privacy and security of the patients health information and records.
• NeHA aims to promote standardization of electronic health records (EHR's) and facilitate its exchange across facilities in a secured manner.

• Among them e-health initiatives are given priority in Andhra Pradesh as they form the bridge or the connection between the health of an individual and health records maintenance of the patients by the Government in toto.

• Collaboration : All the stake holders viz; healthcare providers, consumers, healthcare technology industries and policy makers.
Composition of NeHA: Union health ministry setup a note for setting NeHA.

Authority will have 1 Chairman, 4 fulltime members & a standing consultative committee.

Chairman – Eminent person from the field of Medicine or Law.

Members – 3 members from different fields like Medicine, public health, IT standards, Health economics, management etc.

Member secretary – maintains the coordination and effective functioning of the authority.
• Standing consultative committee:
  Have representations from –
  Ministry of Health
  Directorate general of health services
  NASSCOM
  IRDA
  WHO
  MCI
  Consumer rights activists
• Main Aim of the NeHA:
  Integration of multiple health IT systems in a way that ensures security, confidentiality and privacy of the patient data.

• Ultimate goal:
  Centralised electronic health record repository of all the citizens.

  This will ensure health history and status of all the patients would always be available to all the health institutions.
Functions of NeHA:

- To guide the adoption of e-health solutions at various levels and areas in the country.
- Meaningful aggregation of health and governance data.
- Storage / exchange of electronic health records at various levels in a cost effective manner.
- To facilitate integration of multiple health IT systems through health information exchanges.
- Continuity of care is ensured.
- Formulation of policies, strategies and implementation of plan for coordinated e-health adoption by public and private care providers, that are best suited to Indian context and enable accelerated health outcomes in terms of access, affordability, quality and reduction in disease mortality & morbidity.
• To promote e-health, telemedicine, remote healthcare by establishing a network of different institutions.

• Formulation and management of health informatics standards.

• Laying down data management, privacy and security policies, standards and guidelines in accordance with statutory provisions.

• To promote setting up of state health records repositories and health information exchanges.

• To deal with privacy and confidentiality aspects of electronic health records.

• Govt of INDIA, MoHFW has published EMR/EHR standards for India in 2013.
• Benefits:
  Repeated/frequent undergoing of tests will be avoided & also whenever they visit the new doctors or during the followup.
• Expenditure will be decreased.
• Better management of qualitative health care by providing accurate, uptodate and complete information about the patients at the point of care will be available.
• It can also help to generate epidemiological data on a massive scale.
• Communicable, noncommunicable and infectious data collection will be done easily.
• Health history and status of all patients would always be available to all health institutions.
• Speedy access to patient records in crucial conditions.
• Connectivity between hospitals and real time information transfer will reduce medical errors.
• Promote legible and complete documentation, coding and billing.
• Improves productivity of health.
• E-infrastructure – medical data stored in files, in hospitals, clinics with individual doctors.
• List of e-health initiatives in AP:

1) e-Vaidya – Telemedicine project pilot in urban health centers (ppp)
2) RBSK
3) MCTS & RCH
4) Mee Arogyam
5) e-health – EMRI (108 – services 24*7)
6) Public health
......contd

In Dept of AYUSH.....
✓ Dispensaries
✓ PHC’s
✓ CHC’s
✓ Wings hospital
✓ Data collection and submission of reports
✓ Medical colleges and Hospitals
✓ NAM –AYUSH GRAM, NRHM, NUHM, & RBSK
✓ Registered practioners – UG, PG, Phd
✓ Research Institutes
Pharmacy, pharmacists and manufacturing units

APMAPB

Drugs standardization, quality control, safety and efficacy

Detection of Adultrations

DTL (Drug testing laboratories).

...are the places where IT is used extensively for the management of HEALTH.
• AYUSH Dept:
• Ayush portal maintenance
• Citizen charter maintenance
• Comprehensive idea about the particulars and functions of AYUSH department for the information of the public.
• Information regarding various activities of the dept.
• For information transparency.
Dispensaries, PHC’s, CHC’s, wings hospitals….

Educating and motivating the public & School children about HEALTH & healthy habits.

Healthcare interms of Preventive, promotive and curative aspect

Conduction of Awareness programmes on seasonal diseases, communicable and Non communicable diseases.

Awareness on environmental health.

Personal hygienic maintenance.
Collection of the data of the patients accordingly.

Male,
Female,
Children

Disease wise

Submission of the reports.

Daily basis (swineflu camps, janmabhoomi programmes, at the time of Pushkaras),
Weekly basis,
Monthly basis.

And also disease wise.
Especially for swineflu Preventive and curative measures are taken by conducting awareness programmes, medical camps and medicines are distributed extensively by the AYUSH department in their jurisdictions respectively.

Timely supply & distribution of medicines, sharing of medicines in shortage places, submission of the reports are done easily by utilizing the technology.
JANMABHOOMI PROGRAMME 2017:

Family health was given prime importance. From the Ayush dept awareness programmes and medical camps were conducted and distribution of medicines to the needy people done through out the period.

Services utilised patients data are submitted on daily basis through Ayush portal.
Submission of medicines indendents. (Timely receiving)
Indent submission of medical equipment.
Implementation of Biometric attendance.

All these are carried out through AYUSH PORTAL easily by using the IT as they are interlinked with one another.
• AYUSH gram:

• The Dept of Ayush under Ayush gram is selecting a village where there is no medical facility in the dispensary jurisdiction, for rendering Ayush services - for the promotion of health care of the people by using information technology.
Data collection census for Ayush gram selection is mainly done by utilising the internet like....

4 villages from one revenue division
Population range 1000-2000
No of houses 300-500
Majority of People of that village should be poor, SC, ST, BC & minorities.
Selected village should be located in remote, backward areas and far distance from the towns should be selected.

For all these things data collection and data submission is done by utilizing the IT technology with ease.
Activities:

- Awareness on seasonal and communicable diseases and preventive measures to be followed.
- Implementation of 2 medical camps/month with the help of social volunteers taken in the village.
- Promoting Ayurvedic plant cultivation with the help of Forest, Agriculture and Horticulture Dept’s.
- Aromatic plants cultivation by taking the help of APMAPB, CIMAP board & NMPB.
- Preventive measures in communicable diseases.
- Implementation of training programmes, seminars and workshops.
“VILLAGE SWARAJ” a book published from Navajeevan trust, are the selection’s from the writings of our Father of the Nation “MAHATMA GANDHI” – illustrates his views about the requisites of the villages…

- Basic education
- Health and hygiene
- Transport
- Agriculture
- Animal husbandry
- Village industry

……At present by utilizing the IT these can achieved at a great extent.
• Medical colleges and hospitals

Colleges and hospitals – digitalized
Teaching faculty & non teaching faculty
No of dept’s & students
Library maintenance
Herbal garden and nursery maintenance
Biometric attendance
Total no of patients utilizing the services through OP & IP.
Pharmacy maintenance
• NAM – NRHM, NUHM
  Schemes implemented
  Funds alloted & utilised
  No of people utilised the services.

• RBSK
  Staff: 1Doctor  1pharmacist & 1 Anm
  In a Mandal: Total schools
  Total children
  Health checkups/month
  Medicines distributed
  Referral cases….all these data collection and submission is done using the internet.
- REGISTERED DOCTORS
- UG’s
- PG’s
- PhD’s
- Manufacturing units
- Pharmacists & Pharmacies

Digitalization is implemented in all the above for the achievement of transparent and easily accessible services.
• RESEARCH INSTITUTES – CCRAS, ICMR, TKDL…
• CCRAS:
  Autonomous body of Dept of Ayush, MoHFW.
  Main aim:
  Formulation
  Co-ordination
  Development &
  Promotion of research on scientific lines in Ayurveda.

• ICMR: is apex body funded by Govt of India through MoHFW.
  Main aim:
  Formulation
  Co-ordination &
  Promotion of Biomedical research.
• TKDL - Collaboration

• CSIR, Ministry of science and Technology, Subject experts & IT Technical persons along with Dept of AYUSH.

• Started in 1999 & Implemented from 2001.

• Digital library is being developed on codified traditional knowledge on Indian systems of Medicines.

• Transcribed into 5 International languages – English, French, German, Spanish and Japanese.
• Nearly 8,05,000 Ayurvedic formulations
  98,700 Unani formulations
  9,970 Siddha formulations have been transcribed in patent application format.

• To prevent grant of patents on traditional knowledge & prevention of Biopiracy.

• Development of e-Nighantus & Samhitas.
Research on Panchagavya project – IIT Delhi
• APMAPB
  Total number of plants
  Total area
  Farmers & employees involved
  Yield obtained
  Nurseries maintenance
  Herbal gardens
  Soil tests recording
  Water sources availability
  ...data collection and record maintenance through IT.
• INNOVATIONS IN AYURVEDA:

• DRUGS STANDARDISATION
• QUALITY CONTROL
• SAFETY
• EFFICACY
• DETECTION OF ADULTRATIONS

In all the above, digital technology is used extensively and further helps to minimize the utilization of manpower, time & money.
• DTL (Drug Testing Laboratory)

  Especially in DTL by utilizing the digital technology specific techniques like….
  Chromatography
  TLC
  HPLC
  Powder Microscopy

  … are employed and fruitful results are achieving in short time.

• In addition to the pharmaceuticals, Neutraceuticals, Cosmoceuticals, Aromatics are the new innovations of the Ayush system.
CONCLUSION

As the health of the individual is the primary object, successful implementation of the e-health initiatives leads to the improved and continuous health care of the patients. And also EHR’s storage and maintenance will provide the up to date information of the patient. Finally successful evolution of National integrated health information system will be achieved.
THANK YOU