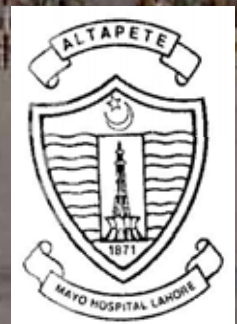


Telemedicine: Baseline study on latent hindrances in successful establishment of telemedicine system in remote areas of Punjab

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Definition

- The term '*telemedicine*' derives from the Greek '*tele*' meaning '*at a distance*' and the present word '*medicine*' which itself derives from the Latin '*mederi*' meaning '*healing*' (Academic)
- telemedicine must include transmitted images. Or Medical care and health supporting practices based on patient information derived from images transmitted from a remote site (objective based, Japan telemedecine dept).
- **Telemedicine:** The use of medical information exchanged from one site to another via electronic communications for the health and education of the patient or healthcare provider and for the purpose of improving patient care (data transfer system).
- "Rapid access to shared and remote medical expertise by means of telecommunications and information technologies, no matter where the patient or relevant information is located. European Health Commission)"

Target Beneficiary

- In remote rural areas, where a patient and the closest health professional can be hundreds of miles apart, telemedicine can mean access to health care where little had been available before.

Aims

□ High lighting the invisible constraints for successful establishment of the system

□ Sharing the Experiences with Galaxy of Clinic, Research & Academia to Promote remote health services

Scheme of Presentation

- **Introduction of telemedicine in Punjab**
- **Application in health disciplines**
- **Working system**
- **Cultural variations**
- **Controversial**
- **Conclusion**

Telemedicine History

•Origin 1905

- The National Aeronautics and Space Administration (NASA) played an important part in the early development of telemedicine (Bashshur and Lovett 1977).
- 1960 medical assistance in apace missions (NASA)
- Japan in 1971, the first telemedical experiment took place in the Wakayama prefecture. The experiment involved closed-circuit television (CCTV) and the telephone circuit.

History of Telemedicine

Evolution, Context, and Transformation

Rashid L. Bashshur, PhD • Gary W. Shannon, PhD

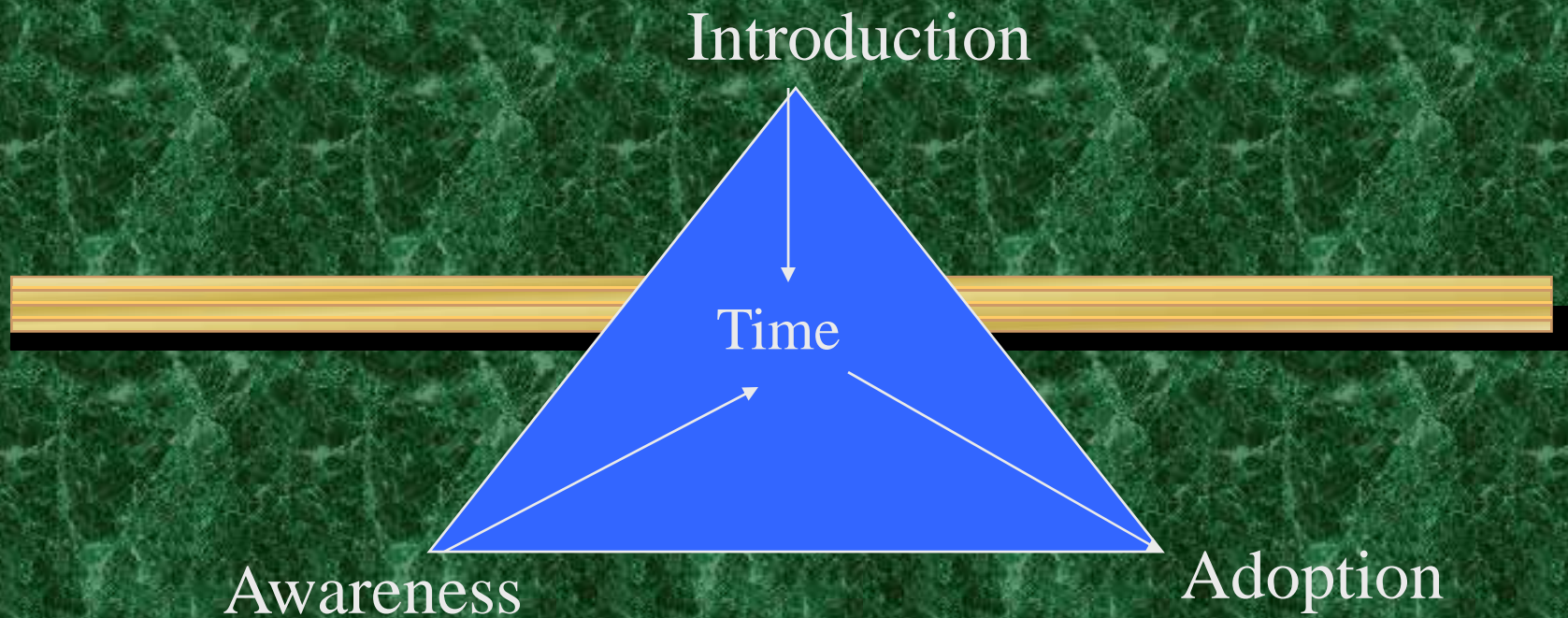
Supported by The National Library of Medicine

Mary Ann Liebert, Inc. publishers

Need for the system

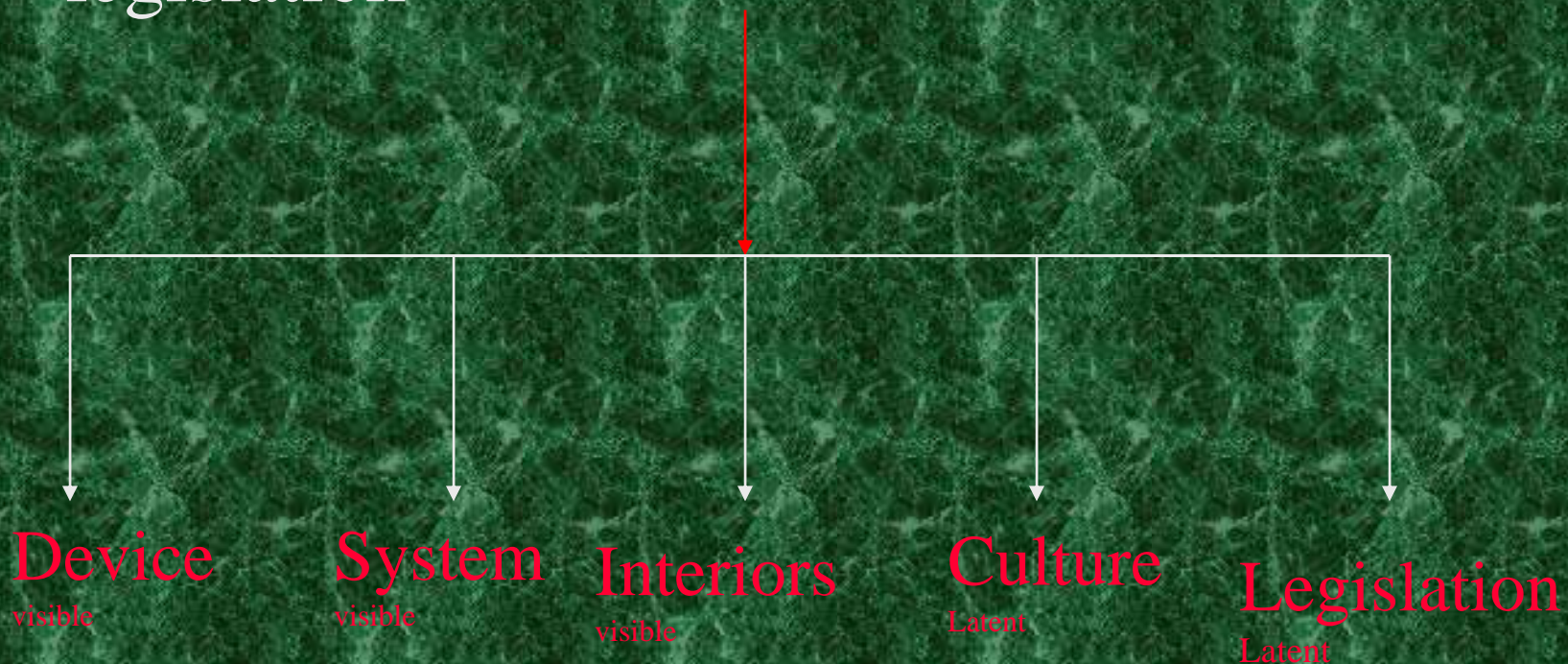
The doctor to population ratio is 1: 1,436 in the country compared to the 1: 500 in wealthy countries. In the case of a specialist, the figures in Pakistan are even worse, 1:12,800.

Adoption process triangle



Issues concerned with introduction of new technology

- Visible: System operation and management
- Latent: site environment, culture and legislation



Difference in impact

- Visible: temporary and easy to recover
- Latent: long-lasting and difficult recover

Logics

Involvement of masses and uncountable silent actors

Device

- Connectivity
- Speed
- Add problems related to net and add some pictures or symbols related to this

System

- Operating system

Give picture of administrative network like staff at hub and remote and there job in one sentence or word

- Linking of expert at hub and remote area

Interior

- Add photographs of studio
- Wall color
- General out look
- Studios impression like attractive or boring

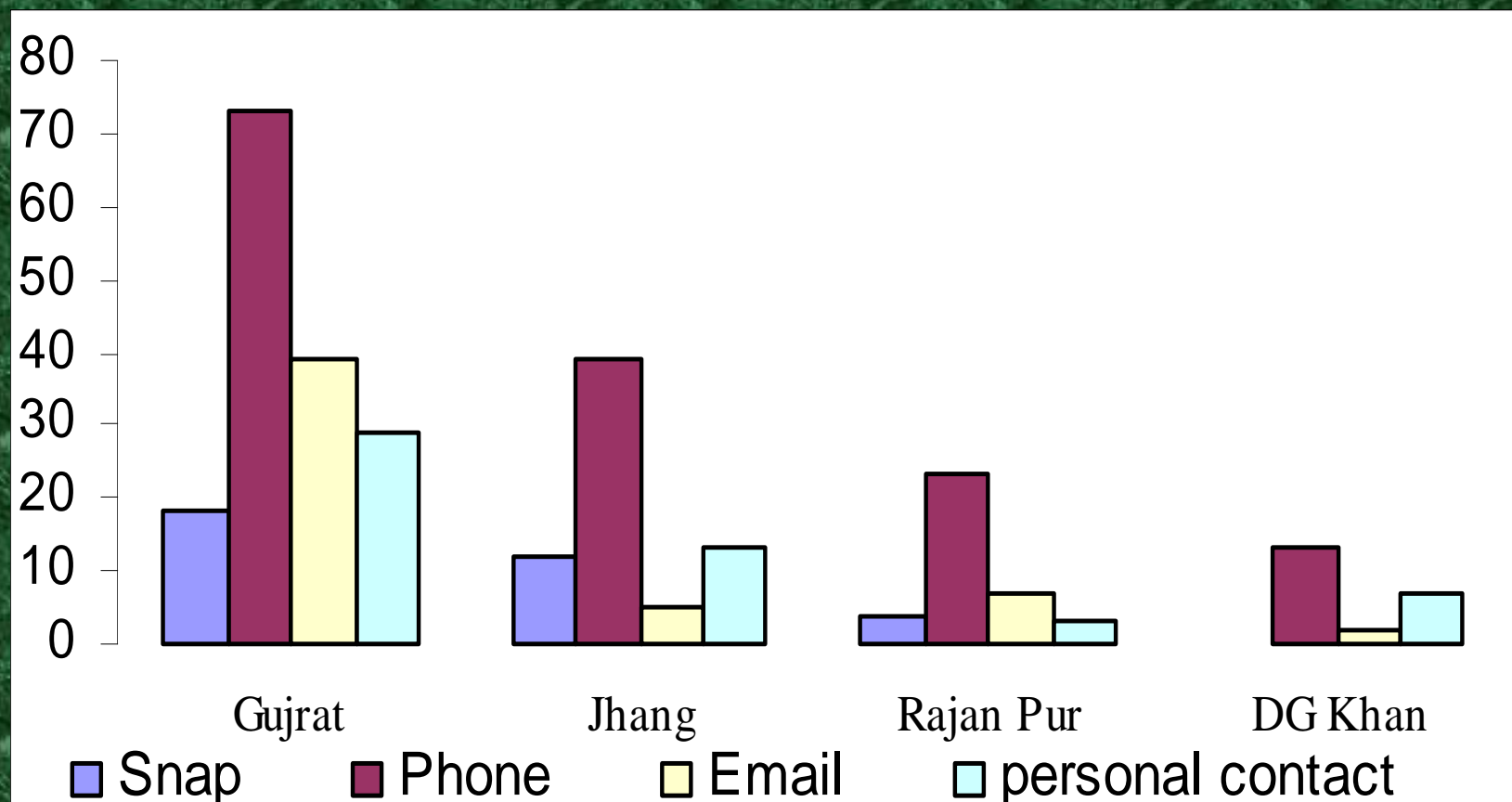


Cultural

Interaction of man with community based on
Symbolic interaction & ethno methodology

- Social Norms
- Believes
- Affiliations: religious, financial, political...
- Family unit pressure
- Community pressure
- Leading to social crimes

Cyber crime statistics (Aug-Oct. 09) in the telemedicine facilities provided districts of Punjab



Deviation from social norms

- Financially deprived group is the real victim
- Un declared war
- Domination of social revenge over rules of law
- Isolation
- Psychological war

Legislative

- Privacy
- Data storage
- Specifications of equipments and system connectivity's
- Protecting rights of patient, doctors and facilitators
- Licensing
- Minimum pre requisites for a new entrant
- Illegal entrants in the system
- Premises of freedoms for local and foreign investor in the Telemed

Privacy

Patient should freely discuss his/her problem with doctor

Add photograph of people assisting patient or giving his history to the dr.

Data storage

- Need for data bank
- Teenager hacking
- Utilization of data in

R&D

M&E

P&E

Data Management system at Mayo Hub

- Structured questionnaire for
 - feed back
 - facility introduction
 - future reference
 - Follow up

بسم اللہ الرحمن الرحیم
 حصا اول (مشورہ سے پہلے)
 موضوع کی نامی: R.A. Faiz
 نام (اردو): واجد علی
 والد کا نام: عبد المجید
 جنس: مرد عورت
 عمر: ۲۰ سال
 ایڈریس: سہیل سٹریٹ، لاہور
 کاؤنٹی: لاہور
 ذاتی معلومات
 ذریعہ معاش: سہیلی مزدوری کاشتکاری
 تعلیم: ابتدائی ثانوی تیسری دیگر
 ذاتی رہاؤ کی کیفیت
 (۱) کمرے چھوٹے (۲) کمرے بڑے
 (۳) کمرے چھوٹے (۴) کمرے بڑے
 (۵) کمرے چھوٹے (۶) کمرے بڑے
 (۷) کمرے چھوٹے (۸) کمرے بڑے
 میڈیکل ریکارڈ
 مرض کی ہستی: ہرگز نہیں کبھی ہمیشہ سے
 علامات: جوشیں درد اور سوزش
 نام ان کی ہستی: ہرگز نہیں کبھی ہمیشہ سے
 ۲۰۱۸

- Filing and folders

We are conscious and careful
for

- **Image: pixels and resolutions**
- **Sound**
- **Connectivity**
- **Real time access**
- **Follow ups**

General Issues

- Between medical facilitator at remote and doctor at Hub
- between medical facilities and health facilities without doctors
- between co-medicals and individual homes.

Expected negative impact if issues remained unaddressed

- **Decline of the existing system**
- **Defame for human resource involved**
- **Quality Deterioration**
- **Influence of contaminants**
- **Loss of financial and intellectual input**

Data collection for target and reference sites

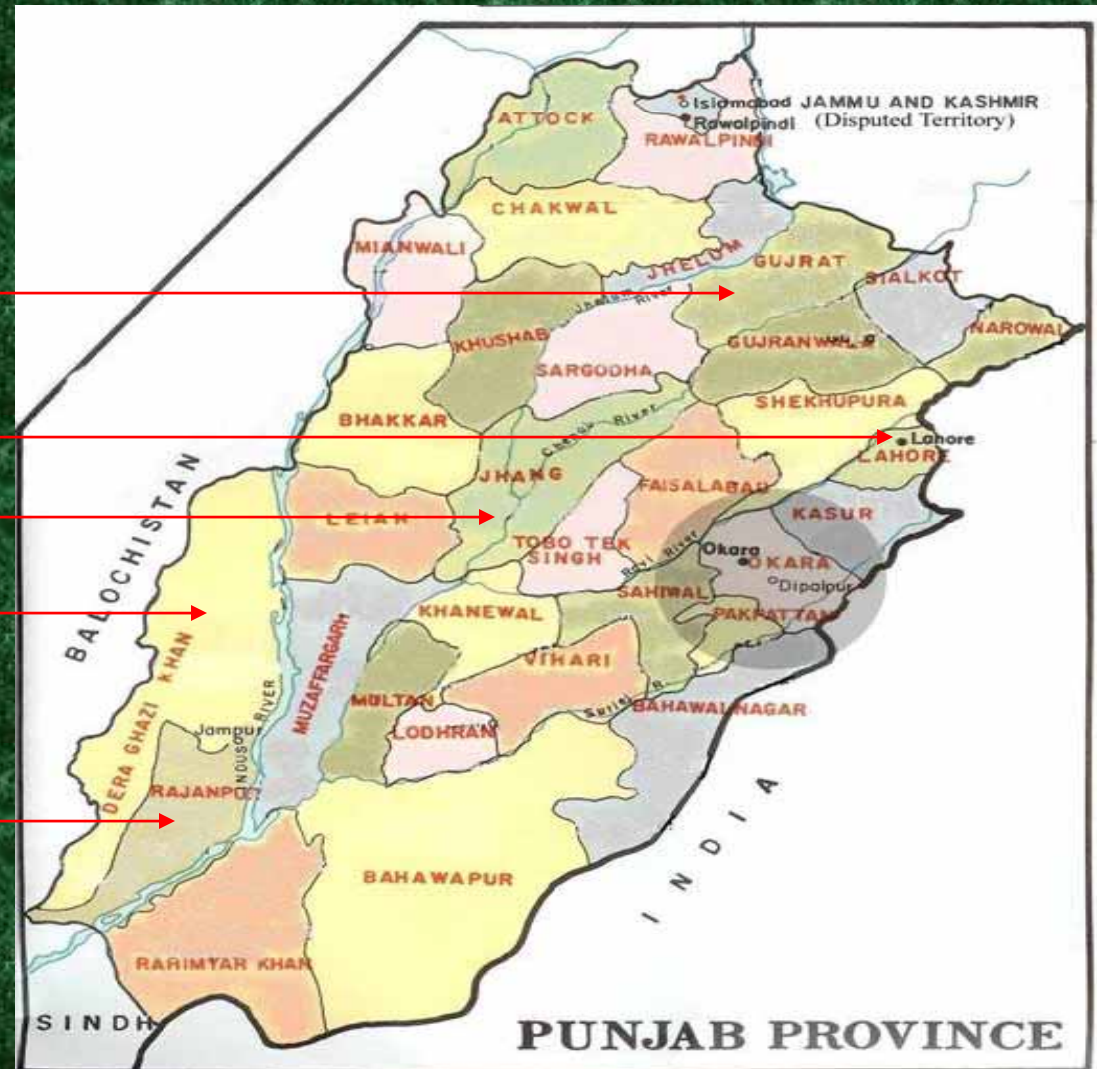
GUJRAT

LAHORE

JHANG

D.G. KHAN

RAJANPUR





THANK YOU