

The Institute of Chartered Accountants of Pakistan



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Pharmaceutical and Healthcare Industry Challenges & Opportunities

PROFESSIONAL ACCOUNTANTS IN BUSINESS (PAIB) COMMITTEE













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Panelists:



Dr. Abdul Bari, CEO at Indus Hospital.



Mr. Anis Ahmed, FCA, MD, at Abbott Laboratories Pakistan Limited.



Mr. Martin Hintz CEO at Healthpass, Medicount Global Limited.



Ms. Shagufta Hassan, FCA, Interim CEO at Agha Khan University Hospital.

Moderator:



Mr. Ziad Chowdhrey, FCA, Director, Country CFO at Novartis Pharma Pakistan Limited

Introduction

As the global Covid-19 pandemic unfolds, the healthcare systems across the world including in Pakistan have come under great stress in coping with the large number of people affected.

There is a race to discover treatment for Covid-19; leading pharma companies, Health R&D start-ups, healthcare professionals and hospitals are collaborating at global level to find the treatment for Covid-19.

The role of all participants in the healthcare ecosystem is critical in finding treatment. From drug or vaccine discovery, clinical trials, drug registration, manufacturing, logistics, access to doctors by patients, role of telehealth; health insurance and financing of healthcare system.

The world has witnessed several episodes of disease outbreaks in the past, but this pandemic is unique, and it is being compared with the 1918 Spanish flu that infected 500 million people or one third of world population.

It has been more 8 months since the outbreak of the virus and scientists, pharma and biotech companies, medical practitioners are trying to find cure and vaccine. There is a global race to find cure or vaccine. Whilst there have been certain claims of progress in development of vaccines with some in Phase 3 clinical trials, there is no vaccine available to date.

The virus is highly contagious i.e. easy transmission from person to another and has forced governments around the world to go for lockdown to prevent it's spread. Healthcare system even in the most developed countries have been challenged and Pakistan is no exception.

COVID-19 Facilities And Operating Model In Hospitals And Pharma Companies

Indus Hospital

The journey of Indus Hospital started with Patient Welfare Association followed by dream of Indus Hospital that was realized and in 2007 a hospital with 150 beds was established with the aim to provide quality care, free of cost.

Today there is network of 12 hospitals across the Pakistan. The hospital's budget this year is 150 million dollars. 92% of the revenue is generated from within Pakistan. Not a single patient has been refused treatment due to lack of money. Indus Hospital has all facilities except for neurosciences and adult oncology.

It is important to mention that Indus hospital is completely dependent on the contribution from the society so one thing that the hospital needs is funds. The vision is to expand operations from 300 bed hospital to 1200 bedded hospital by 2022. In addition to that, 600 bed hospital is being establishing in Lahore by first quarter of 2021.

Post pandemic news from China in late 2019, Indus Hospital in January 2020 converted part of the emergency into Covid-19 area. After first Covid-19 case was reported on February 26, Government formed a Healthcare Taskforce. Within a week 300 million rupees were released, and two hospitals were established: one quarantine center with 120 beds and the other isolation center with 200 beds. 20 ventilators were acquired, and a Covid-19 testing laboratory was set up at Indus Hospital.

Initially there were around 100 cases per day and currently in Sindh 15,000 tests are conducted per day. Being a global pandemic, supply logistics became a major challenge due to export bans in many countries. Moreover, there was shortage of Vaccine Temperature Monitoring Systems (VTMs), Personal Protective Equipment (PPEs) and other medical equipment.

Considering the fragile condition of the infrastructure of health care system in Pakistan, the strategy was to flatten the pandemic curve by controlling the spread of the disease through strict lockdown.

Indus Hospital has the largest molecular lab and more than 2000 tests per day are conducted. Moreover, there is a Covid-19 unit which currently has 60 beds that will increase to 100 beds. Apart from that Indus Hospital is instrumental in establishing laboratories in Jinnah Postgraduate Medical Centre (JPMC) and in interior Sindh.

A positive thing as a result of the crisis is the collaboration between the private sector, public sector and not for profit sector. An example of this is the Sindh critical care initiative which is an agreement between Sindh government, Indus hospital and Agha Khan University Hospital.

Further, Indus Hospital and AKUH are working together for conducting trainings.

Agha Khan University Hospital (AKUH)

Aga Khan University Hospitals in Karachi, Pakistan is a private, not-for-profit institutions providing high quality health care. The Main Hospitals serve as the principal sites for clinical training for the University's Medical Colleges and Schools of Nursing and Midwifery in Pakistan. The quality in health care is extremely essential; a wrong diagnosis leads to a wrong treatment; that may lead to loss of precious life. AKUH has four guiding work principles:

- impact,
- quality,
- relevance and
- access.

The Agha Khan University Hospital is accredited with the Joint Commission International and College of American Pathologist and have collaborations with the Johns Hopkins University.

As Covid-19 being highly contagious, all Covid-19 patients are kept in separate isolated building where they have no way to interact with any other patients.

The Hospital began Covid-19 research with a Table-Top Mock Drill (TTMD) to map the influx of corona virus infected patients and how to cater to them. In February, AKUH

the **Hospital Incident Command System** (HICS) which is used internationally by the JCI accredited hospitals to improve their emergency management planning, response, and recovery capabilities for unplanned and planned events.

Agha Khan was the first hospital to introduce **PCR** based test and the first hospital to admit and treat a Covid-19 patient. Since then, there has been a great deal of learning and it is important to understand that as far as the response to the disease is concerned, the government whether at provincial and federal level, has put in considerable effort.

Private wing is now dedicated for all Covid-19 patients. Emergency department has a separate dedicated respiratory care unit where the Covid-19 patients are treated in emergency. In addition, there is a dedicated testing site created in the football field. The primary safety concern that AKUH has ensure that Covid-19 patients are not mixed with the other patients.

Covid-19 has also done collateral damage, patients fear visiting hospitals and delaying their routine checkups and consultations. AKUH has now restored all the facilities and clinics are resuming. Tele-clinics were introduced with 28 qualified specialists. Other initiatives included home testing services and home delivery of medicines. At the same time, at the hospital, all precautionary measures are taken such as people without mask are not allowed to enter and hand sanitizers are provided.

Abbott Laboratories

Abbott Laboratories (Pakistan) Limited is principally engaged in the manufacture, import and marketing of research based pharmaceutical, nutritional, diagnostic, diabetic care, hospital and consumer products.

During the pandemic Abbott's management major priorities included:

- 1. ensure the safety of employees.
- 2. Ensure continuity of supply of essential medicines, so patients have access to them.
- 3. Stay engaged with healthcare professionals to share global development in treatment guidelines for Covid-19.

For employee safety and due to lockdown, more than 50% of the employees are working from home.

To ensure continuity of supply of medicines, manufacturing plant and those engaged in supply operations continued to perform their duties with proper SOP and safety precautions including social distancing and use of protective masks etc.

Disruptions in flights and lockdown in several countries supplying API and essential raw material ingredients impacted supply chain enormously. This was the real test of the company's resilience and business continuity planning.

Company leadership team created a sense of purpose for operations employees to come to work during lockdown when the rest of the 50% employees are working from home. This required substantial communication and engagement with the employees. Abbott leveraged digital technology for company's field force to communicate with Doctors and healthcare professionals. To assist patients company helped hospitals to set up tele-clinics who were unable to reach the doctors. Company joined hands with new healthcare startups for Online pharmacy dispensing and delivering medicines. Abbott also arranged webinars for pharmacists to increase their knowledge about the disease and to prepare them to respond to patients.

Abbott's focus is primarily in the diagnostic area the company collaborated with Indus Hospital to set up molecular lab test and supplying instruments across Pakistan with capacity of conducting 15000 tests per day. Further, antibody tests are being conducted in major labs across Pakistan.

Currently Sixty-five molecules are being tested globally; however, focus is on developing vaccine. It is expected that by the end of the year there might be a vaccine for the virus.

Role of Pharmaceutical Companies, Opportunities And Challenges

No healthcare system in the world can deliver treatment and care to patients without supply of quality medicines. Both Healthcare systems and Pharma companies need to work together in ensuring affordable healthcare for all.

Opportunities for Pharma Industries

Market Attractiveness

Pakistan's large population with sub optimal access to quality medicines and high disease burden offers growth opportunities to pharma companies.

Export Potential

According to McKinsey study, with certain deregulation, Pakistan's export potential could reach one billion dollars which is currently less than 200 million dollars in Pakistan. India pharma exports are more than 20 billion dollars. In terms of price control India only regulates 348 molecules. Pharma Industry in Bangladesh and India are growing with exports more than 10 times of Pakistan. We have the ability, infrastructure and human resource, we need to optimize regulatory policies.

Bangladesh and India have many Food and Drug Administration (FDA) approved plants. However, we do not have a single manufacturing plant that is FDA approved. This impedes our export potential in developed markets. We need forward looking policies to make investment in infrastructure attractive for companies to obtain FDA certification.

Challenges for Pharma Industries

Price Controls

Pharma industry is largely import dependent, continuous weakness of Pak Rupee has resulted in high inflationary environment together with high utility cost. In such an environment price controls hurts margin and industry attractiveness.

Low margins make certain medicines not viable to market for pharma companies and they stop making them that results in shortage of medicines and distress to patient. Several multinational companies have exited because of low margins.

Recent introduction of inflation indexation pricing was welcomed by the industry, however new changes in price controls would hamper timely price adjustments.

Delay in New Medicine Registration

It takes significantly longer time to obtain registration for new research-based products. Delay in registration adversely affects patient's access to more effective new treatment.

Delay also impacts profitability due to Rupee erosion increasing import costs, companies sometimes do not launch those products. Patients end up paying higher price for those medicines coming through the gray channel.

Price adjustment for new medicine for increase in import cost would ensure a fair margin and incentive to introduce new research-based medicine that will be beneficial for patients.

Sourcing APIs and Way Forward

The pharmaceutical industry is highly dependent on import of active ingredients from neighboring countries such as China and India. Reliance of local pharmaceutical industry on India is estimated at 60%. The government should incentivize investment in manufacturing of API to protect industry from geopolitical impact and conserving foreign exchange. Investing in basic manufacturing of active ingredients will create employment opportunities and ensure less dependency on imports.

Healthpass - Tele-clinic in Pakistan

Healthpass is a product by Medicount Private Limited, registered with Securities and Exchange Commission of Pakistan. They have Partnered with Jazz and Mobilink Microfinance Bank, Medicount looks to revolutionize the healthcare payments segment and help millions to better manage healthcare expenditures and get the best available quality services at a discounted price.

Healthpass is a digital platform that allows its patients and caregivers consumers to find quality healthcare services nearby; pay using mobile wallets and earn discounts on every medical payment.

Healthpass is an app-based service where patients connect with General Physicians (GPs) as well as Specialists such a dermatologist, urologist etc. The App contains the doctor's profile photo, qualifications, availability and fee and the user can select the doctor for an online appointment. The patient gets a doctor's report and prescription afterwards that also contains doctor's PMDC number which makes it a legally valid prescription acceptable to pharmacies.

Benefits of using Healthpass application include:

- Fast consultation with doctors, there is no waiting time, no travel is required so there is no travel cost as well.
- Consultation fee for doctors is the same as it is generally in the hospitals and clinics.
- 80% of the cases get resolved on the first call without physical examination and 20% are referred to a specialist.

Covid-19 has been a catalyst to the growth of digital health. Healthpass helps connects patients access to healthcare professionals.

Telemedicine is beneficial for people with limited mobility such as the elderly or women who are restricted socially from going out or in the current situation, due to lockdown. It is also helpful for people who are pressed for time.

Pakistan is an ideal market for tele health startup as it has a very large population. It has various health infrastructure challenges therefore having the largest potential for disruption and thus the biggest impact. It is time for a digital revolution in healthcare sector in Pakistan.

Data Privacy in Healthpass

Healthpass is custodian of personal medical as well as financial data of its patients, hence there is a bigger responsibility of privacy and security. In Healthpass the mantra is to treat customer data like a bank treats its customer's savings.

There are two aspects to data: data privacy and data security. Data privacy is principle based and covers the legal aspect whereas data security concerns the level of safety of the data in the system. Healthpass is compliant to the European Union's General Directive on Data Protection which is currently considered the gold standard worldwide. Healthpass also practice friendly hack to uncover security vulnerabilities which facilitates making their system more secure.

Health care insurance in Pakistan

Corporate health insurance is established business model due to larger group pooling. The government should take policy initiatives to bring micro health insurance and for the insurance companies to introduce individual health care insurance. For example, in Kenya 88% of the population is insured. A model for health care insurance could include a saving plan along with health insurance cover.

Pakistan has huge potential for health insurance as it has a large population of 220 million people. Development in the healthcare insurance can reduce financial burden to individuals and government ensuring high quality healthcare for all.

Preparing for the future

Globally Governments, Healthcare Systems as well as private sector organizations were overwhelmed by impact of Covid-19. None could have imagined or prepared for the scale of pandemic. We need to learn from our local and global experience for better preparation to meet any future pandemic.

Some of the learnings include:

- 1. A global alliance of governments, scientists, healthcare professionals and pharma companies to share information on spread global pandemic. Strong collaboration with organizations like WHO and other state Healthcare systems to share treatment guideline and patient response experiences.
- 2. A high-level country disaster management body should be geared up to manage future pandemic. Significant funds need to be diverted to the Disaster Management to contain pandemic.
- 3. Hospitals should be equipped with Personal protective equipment, adequate supply of essential medicines and vaccines for doctors, nurses and support staff.
- 4. Governments need to strongly enforce isolation and lockdown to minimize and contain pandemic.
- 5. Strong Communication and Public awareness program for education on precautions.
- 6. Organizations need to be far more agile to work remotely using digital technology during pandemic.
- 7. Supply Chain need to be more dependable through multiple sourcing network and local manufacture of basic pharma ingredients.
- 8. Healthcare Systems and Pharma organization need to develop all possible scenarios and appropriate actions to contain pandemic.
- 9. Strong Leadership and communication is required at all levels to ensure people safety.

Audience Questions

Shagufta Hassan

- 1. Are Pakistan's laboratories as equipped as foreign countries?
 - Why is there a difference between test results of COVID-19 from different laboratories?

AKUH is only Lab in Pakistan that is accredited with the College of American Pathologists. A report from CAP accredited lab has an accuracy in the range of 99%. To reach this kind of accuracy, there are over 3000 checks and standards that are applied on every single test.

AKUH offers a large number of tests that are comparable to large international laboratories of the world such as Mayo Clinic Laboratories and the SRL Diagnostics that perform close to 10,000 to 11,000 tests. At AKUH, only 12 to 15 tests which are of rare genetic tests are sent abroad.

For Covid-19, there are two types of diagnostic tests:

- 1. Antibody test. Antibody develops in the system during the 8th to 10th day of getting infected.
- 2. PCR test. PCR test is more accurate which means that as soon as an individual comes in contact and the virus enters your body, test results become positive. However, in some people the virus takes longer to show on a report. Comparing the antibody test results with the PCR test results will vary depending on the day the virus has entered in the body.
- 2. What role would you like to see Finance teams play in responding to the current challenges?

The Finance teams can help ensure that all the precautions including social distancing, wearing of masks at all time, frequent washing of hands are being practiced. The Pandemic has taught the world is that health cannot be ignored, therefore, the Finance teams should ensure that other than capital, investment in high quality health benefits is essential and should be ensured.

3. Is Aga khan partnering with global vaccine manufacturers to import COVID-19 vaccine when developed? Yes, we are.

4. Are there plans to expand AKUH network in other cities in Pakistan?

AKUH has a nationwide network of Clinical Laboratories in 126 cities of Pakistan and we also have outpatient medical centers including pharmacies in Karachi, Hyderabad, Larkana, Nawab Shah, Jacobabad, Lahore, Rawalpindi, Multan, Sargodha, Islamabad and Peshawar. We will continue to grow our network to other cities of Pakistan.

5. How do you ensure high quality of patient care?

Aga Khan University Hospital is the first and only Academic Medical Center in Pakistan which is accredited by the Joint Commission International. AKUH follows the JCIA standards which are the gold standard in quality and safety. The Clinical Laboratories of AKUH are the first and only Clinical Laboratories in Pakistan that are accredited with the College of American Pathologists, which is the gold standard in Laboratory testing. Implementation of this requires AKUH Clinical Laboratories to follow over 3000 quality standards in processing lab samples.

 Is treatment protocol prescribed at AKUH to its doctors to ensure high standard of treatment? Yes.

Anis Ahmed

7. What are trends you are seeing in pharmaceutical industry in Pakistan after COVID-19?

Major shift is more use of digital technology, both from patient's perspective and from industry's perspective. Digital and multi-channel engagement is going to play a major role moving forward.

Countries will be forced to reconsider their approach towards API sourcing. Pakistan's pharmaceutical industry's reliance for API is mainly on other countries; it has highlighted sustainability risk.

8. What are the three major lessons learnt in this pandemic to maintain supply chain of medicine?

Pandemic is something that cannot be predicted and thus cannot be planned. However, we need to be vigilant on any global developments. Similarly, supply chain is one of the areas that cannot be accurately predicted.

Chartered Accountants as business partners have a crucial role during pandemic crisis and by focusing on business forecast. They need to assess reliability of business forecasts and how the company's supply chain is geared to deliver plan. I'll link the learnings with how do accountants really work on forecasting processes within their organization.

Dr. Abdul Bari Khan

9. Due to safety concerns, medical staff want to switch to other professions as they feel unsafe working in an environment that is not able to provide protection. How could you motivate them to stay in this noble profession?

Medical doctors who are practicing are not switching to any other profession. Those who have not started practicing yet have switched for bureaucracy and other professions. Head of Department as a leader must be a role model for others. If the leaders are on frontline working with younger doctors in wards, it keeps the young doctors motivated. Moreover, if protective environment is provided in the hospitals, it is the safest place as compared to the community where we do not know who is infected with virus. We have to provide facilities such as protective equipment etc. to doctors. Also, it comes down individual's ethics, values, purpose and passion.

Martin Hintz

10. There is still a large population, who do not have access to smart phones or are not well versed with using mobile applications. How do you intend to tap that market?

Healthpass experience has been surprisingly positive. Although many people don't have smart phones but one or two people in the family have it. Our Ninety per cent of registrations on the app are males and fifty per cent patient population are females. Smart phone is always in some way within reach, but more difficulty is with the connectivity and even connectivity is not such a big problem as it has improved in two or three years.

As per our experience, someone in the family network does have a smartphone and is sufficiently tech savvy to navigate a teledoc app. This is mostly the young and male members of the family. We also notice that it is usually the younger generation who calls us first for their own personal adolescence issues. The next week, they would bring their mother or father online for her health issues and lastly their grandparents. In short, it requires just one champion in the family to make teledoc accessible to all family members.

Healthpass is trying to take innovative initiatives to bridge the gap. For example, Healthpass in collaboration with the Digital Pakistan and District Health Office, trained over 300 lady health workers. They visit patients and they have the app on their phones which means doctors are accessible easily so if anyone does not have smart phone, they can still connect with the doctors through the healthcare worker. Similarly, we gave access of application to pharmacies so the pharmacists can connect the patient with the doctor.

11. What is the scope of telemedicine in developing countries and what are the doctors' concerns regarding this facility?

The scope for telemedicine in developing countries is very wide. This is especially so for large countries like Pakistan with many remote and disadvantaged communities that lack convenient access to quality healthcare. Doctor's main concerns relate to three things:

- (1) Firstly, their ability to assess patients when they can't physically examine them. This concern generally subsides after the first few consultations as around 80% of cases can indeed be dealt with purely over video. Only 20% need further physical investigation.
- (2) A second concern relates to their ability to set their own pricing and timings, as well as to the cut that a teledoc platform would charge out of the doctor's fee. Flexibility on pricing and timings is usually given on teledoc platforms and fees are reasonably low.
- (3) Lastly doctors want to have the teledoc platform to drive new patients to them. Some of the larger teledoc platforms in Pakistan are already managing to do that, while the smaller ones are struggling to generate enough referrals to doctors.

12. Is telemedicine industry regulated in EU?

Since Healthpass focusses exclusively on Pakistan, I know too little about EU telemedicine legislation to answer this question.

13. How can a patient access a tele doctor?

- There is growing number of teledoc services operating in Pakistan. A quick internet search or an app store search will bring up a good list of providers to choose from.
- After downloading and registering for a teledoc app, the user can choose the specialty and the doctor that he wants to speak to, book an appointment and pre-pay.
- After the video chat with the doctor, a doctor's report and a prescription is sent via app or SMS or both, depending on the teledoc platform.
- Several platforms offer extra facilities such as home medicine delivery, electronic medical records or insurance.

14. How can public-private partnership work in development of telemedicine and health insurance?

There is a wide scope of public-private-partnerships.

What is generally important that the interest between private and public side are well aligned and there is a clear sustainability strategy in place that ensures project scale and continue after any initial pilot.

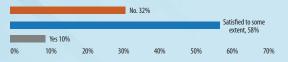
Just as a concrete example for a successful PPP: Healthpass Teledoc, for example, has partnered with the District Health Office in Islamabad and the Digital Pakistan Foundation to quip 350 Lady Health Workers in Islamabad with unlimited teledoc access. This project was initiated as a rapid response to the COVID-19 pandemic. During the initial phase of 3 months, over 5,000 calls were expedited. We could see how Teledoc has become an integral part of the LHWs daily work routine. Together with the government, we are planning for the expansion of this initiative.

15. Most of the insurance companies just offer hospitalization cover, very few organizations offer OPD cover. Is Health Pass making plans to make OPD affordable?

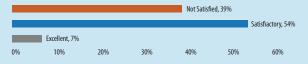
Yes, we have already launched a cashless OPD scheme where employees can pay for outpatient expenses directly from their OPD allowance. Claims are submitted and processed online. The cashless facility helps employees to seek care earlier and eventually reduces overall insurance premiums and health budget utilization for the employer. This service can also be combine with teledoc where the first point of call can be a tele doctor. This further speeds up the delivery of quality health care and reduces the overall healthcare costs.

Audience Polls Results

Are you satisfied with the current healthcare facilities of private hospitals?

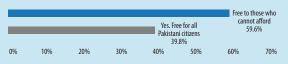


How do you rate government steps to contain Covid-19 pandemic

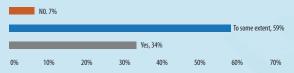


Do you think healthcare should be free?

N0.0.6%



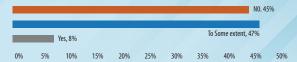
Is Tele Health going to provide affordable 24/7 access to doctors?



Should the government focus on prevention or providing cure?

| Cure, 5% | | | | | | | | |
|----------|-----|------|-------------|-----|-----|-----|-----|-----|
| | - | Prev | ention, 21% | | | | | |
| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% |

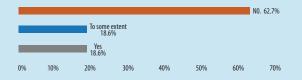
Are pharma companies providing affordable medicines?



Do private hospitals offer better healthcare compared to public sector hospitals?



Should medicine prices be deregulated?



Is your organization currently considering to implement telehealth for your staff, if not already done?

| | | | | | | | | NO. 75% |
|----|-----|-----|----------|-----|-----|-----|-----|---------|
| | | | Yes, 25% | | | | | |
| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% |

This paper is an extract from the ICAP Webinar 'Pharmaceutical and Healthcare Industry Challenges & Opportunities' held on July 10, 2020. Around 5100 participants viewed the webinar locally as well as internationally. The paper is reviewed by Member of the ICAP Professional Accountants in Business Committee Mr. Khalid Noor, CFO, Director Finance, HR and IS, Macter International Limited.