

# Country Policy and Information Note Pakistan: Medical and healthcare provisions

Version 2.0 September 2020

# **Preface**

# **Purpose**

This note provides country of origin information (COI) for decision makers handling cases where a person claims that to remove them from the UK would be a breach Articles 3 and / or 8 of the European Convention on Human Rights (ECHR) because of an ongoing health condition .

It is not intended to be an exhaustive survey of medical and healthcare issues in Pakistan.

# **Country of origin information**

The country information in this note has been carefully selected in accordance with the general principles of COI research as set out in the <a href="Common EU [European Union]">Common EU [European Union]</a> Guidelines for Processing Country of Origin Information (COI), dated April 2008, and the Austrian Centre for Country of Origin and Asylum Research and Documentation's (ACCORD), <a href="Researching Country Origin Information - Training Manual">Researching Country Origin Information - Training Manual</a>, 2013. Namely, taking into account the COI's relevance, reliability, accuracy, balance, currency, transparency and traceability.

The structure and content of the country information section follows a <u>terms of</u> reference which sets out the general and specific topics relevant to this note.

All information included in the note was published or made publicly available on or before the 'cut-off' date(s) in the country information section. Any event taking place or report/article published after these date(s) is not included.

All information is publicly accessible or can be made publicly available, and is from generally reliable sources. Sources and the information they provide are carefully considered before inclusion.

Factors relevant to the assessment of the reliability of sources and information include:

- the motivation, purpose, knowledge and experience of the source
- how the information was obtained, including specific methodologies used
- the currency and detail of information, and
- whether the COI is consistent with and/or corroborated by other sources.
- Multiple sourcing is used to ensure that the information is accurate, balanced and corroborated, so that a comprehensive and up-to-date picture at the time of publication is provided of the issues relevant to this note.
- Information is compared and contrasted, whenever possible, to provide a range of views and opinions. The inclusion of a source, however, is not an endorsement of it or any view(s) expressed.
- Each piece of information is referenced in a brief footnote; full details of all sources cited and consulted in compiling the note are listed alphabetically in the bibliography.

### MedCOI

MedCOI is an Asylum and Migration Integration Fund financed project to obtain medical country of origin information. The project allows 12 European Union member states plus Denmark, Norway and Switzerland to make use of the services of the 'MedCOI' team in the Netherlands and Belgium.

The MedCOI team makes enquiries with qualified doctors and other experts working in countries of origin. The information obtained is reviewed by the MedCOI project team before it is forwarded to the UK or other national COI teams. Previous MedCOI responses are stored on its database which participating states are able to access.

## **Feedback**

Our goal is to continuously improve our material. Therefore, if you would like to comment on this note, please email the <u>Country Policy and Information Team</u>.

# Contents

Asse	essment	6
Gu	ıidance on medical claims	6
Cour	ntry information	7
1.	Healthcare system	7
	1.1 Overview	7
	1.2 Issues facing the healthcare system	8
	1.3 Affordability and health insurance	9
	1.4 Public sector	11
	1.5 Private sector	11
	1.6 Non-government organisation (NGO) provision and assistance	12
2.	Healthcare facilities	12
	2.1 Hospitals	12
	2.2 Public	12
	2.3 Private	14
3.	Covid-19	14
4.	Medical Conditions	14
	4.1 Cancer	14
	4.2 Cardiovascular disease	17
	4.3 Dental treatment	20
	4.4 Diabetes	21
	4.5 Drug addiction	21
	4.6 Gastroenterology, internal medicine and diagonostic imaging	23
	4.7 Geriatrics	24
	4.8 Hepatitis	24
	4.9 HIV/AIDS	25
	4.10Liver disease	26
	4.11 Malaria	27
	4.12Mental health	27
	4.13 Musculoskeletal conditions	30
	4.14 Neurological conditions – epilepsy	31
	4.15 Ophthalmology	32
	4.16 Paediatrics	32
	4.17 Palliative care	33
	4.18 Pulmonology (lung diseases)	34
	4.19Renal conditions	

4.20 Speech therapy	36
4.21Tuberculosis (TB)	37
4.22Women's health	38
5. Pharmaceuticals	39
5.1 Accessibility to pharmaceutical drugs	39
5.2 Availability of pharmaceutical drugs	40
5.3 A-D	40
5.4 E-H	41
5.5 I-L	41
5.6 M-P	42
5.7 Q-T	43
5.8 U-Z	43
Terms of Reference	44
Bibliography	45
Sources cited	45
Sources consulted but not cited	48
Version control	50

# **Assessment**

Updated: 3 September 2020

# **Guidance on medical claims**

For general guidance on considering cases where a person claims that to remove them from the UK would be a breach Articles 3 and / or 8 of the European Convention on Human Rights (ECHR) because of an ongoing health condition, see the instruction on <a href="Human rights claims on medical grounds">Human rights claims on medical grounds</a>.

**Back to Contents** 

# Country information

Section 1 updated: 3 September 2020

- 1. Healthcare system
- 1.1 Overview
- 1.1.1 The World Health Organization Regional Office for the Eastern Mediterranean (WHO EMRO) noted:

'The health care delivery system in Pakistan consists of public and private sectors. Under the constitution, health is primarily [the] responsibility of the provincial government, except in the federally administrated areas. Health care delivery has traditionally been jointly administered by the federal and provincial governments with districts mainly responsible for implementation. Service delivery is being organized through preventive, promotive, curative and rehabilitative services. The curative and rehabilitative services are being provided mainly at the secondary and tertiary care facilities. Preventive and promotive services, on the other hand, are mainly provided through various national programs; and community health workers' interfacing with the communities through primary healthcare facilities and outreach activities.

'The state provides healthcare through a three-tiered healthcare delivery system and a range of public health interventions.

'Some government/ semi government organizations like the armed forces, parastatals such as Sui Gas, WAPDA [Water and Power Development Authority], Railways, Fauji Foundation and the Employees Social Security Institution provide health service to their employees and their dependents through their own system, however, these collectively cover about 10% of the population.'1

- 1.1.2 Export.gov, which provides investment advice to American companies, managed by the United States International Trade Association<sup>2</sup>, noted in its Healthcare Resource Guide for Pakistan, last updated in November 2019:
  - 'In Pakistan, public and private health care systems run in parallel. The public sector, led by the Ministry of Health until recently, has deferred to the provinces for issuance of healthcare to the general population. The administrative and fiscal space of provinces has increased manifold with simultaneous increases in their responsibilities, however they remain deficient in health workforce and facilities, relative to the size of the population.'<sup>3</sup>
- 1.1.3 MedCOI noted in January 2020: 'Pakistan is ranked 154 among 195 countries in terms of accessibility and quality of healthcare.'4

**Back to Contents** 

<sup>&</sup>lt;sup>1</sup> WHO EMRO, 'Pakistan Health Service Delivery', nd

<sup>&</sup>lt;sup>2</sup> International Trade Association, 'About us', nd

<sup>&</sup>lt;sup>3</sup> Export.gov, '<u>Healthcare Resource Guide: Pakistan'</u>, 4 November 2019

<sup>&</sup>lt;sup>4</sup> MedCOI, 29 January 2020

- 1.2 Issues facing the healthcare system
- 1.2.1 WHO EMRO noted that 'Despite an elaborate and extensive health infrastructure, the health care delivery suffer from some key issues like the high population growth, uneven distribution of health professionals, deficient workforce, insufficient funding and limited access to quality health care services.'5
- 1.2.2 Export.gov's Healthcare Resource Guide noted 'The health profile of Pakistan is characterized by high population growth. The rising population pressure on state health institutions has allowed the private sector to bridge the gap of rising demand and limited public health facilities.'6
- 1.2.3 Bertelsmann Stiftung's Transformation Index (BTI), a think-tank, which assesses the transformation toward democracy and a market economy as well as the quality of governance in 137 countries, noted in its BTI 2020 Country Report for Pakistan, covering the period 1 February 2017 to 31 January 2019: 'Despite efforts to decentralize the national administration, the government has made little effort to reform the district administration or to provide it with sufficient funds to upgrade health, education and other basic facilities.'<sup>7</sup>
- 1.2.4 The Government of Pakistan's Economic Survey, which reviewed the performance of Pakistan's economy during the fiscal year 2018-19, concluded in its chapter on health and nutrition:

'Health sector of the country faces tough challenges and there is a dire need to enhance the budget allocation for health aggressively by federal and all provincial governments, especially development expenditure so that increased and better quality health facilities may be available across the country. The present government is committed to increase the health coverage for the growing demand of increasing population. A number of efforts are underway to provide health facilities, increasing health expenditure and to meet goals under SDGs [Sustainable Development Goals] like Sehat Sahulat Program, Civil Registration & Vital Statistics, Deworm Islamabad Insensitive etc and taking expenses at health as investment rather considering it cost.'8

1.2.5 The Pakistan Economic Survey 2019-20, released in June 2020, acknowledged that:

'The present government is committed to improving the health care facilities and provision of good nutrition for effectively utilizing the human potential of the country. The challenges to the health system will be further exacerbated by the direct and indirect impact of the COVID-19 pandemic. The pandemic has posed considerable health risks to an already vulnerable population living in the country with inadequate healthcare infrastructure.'9

<sup>&</sup>lt;sup>5</sup> WHO EMRO, 'Pakistan Health Service Delivery', nd

<sup>&</sup>lt;sup>6</sup> Export.gov, 'Healthcare Resource Guide: Pakistan', 4 November 2019

<sup>&</sup>lt;sup>7</sup> Bertelsmann Stiftung, 'BTI Pakistan Country Report 2020', (p7), 2020

<sup>&</sup>lt;sup>8</sup> Government of Pakistan, 'Pakistan Economic Survey 2018-2019', (p189), 2019

<sup>&</sup>lt;sup>9</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p215), 2020

1.2.6 According to Dr Abdul Bari Khan, chief executive officer of the Indus Health Network (IHN – a not for profit healthcare system<sup>10</sup>), speaking in December 2019, 'Neither the private nor the government-run hospitals are providing quality healthcare services to people in Pakistan. Private hospitals are charging a lot, but except for a few, most of private hospitals are not meeting healthcare needs of people, while everybody knows about the service delivery of government-run hospitals... [which were] overburdened and cannot provide proper healthcare services to the people.'11

**Back to Contents** 

# 1.3 Affordability and health insurance

1.3.1 A MedCOI response, dated 29 January 2020, noted:

'Public hospitals provide free healthcare to all citizens; however, around 78% of the population pay for healthcare. The issue is according to one article the quality of care. A study conducted on the effects of health insurance on child labour reduction concurs, concluding that due to the poor quality, 75% of the population instead pay for expensive private care. Less than 2% of the households have formal insurance. The result is that health issues are a 'significant economic risk' for low-income Pakistanis. According to the International Labour Organization, tertiary hospitals may offer free consultation and bed for some patients, but surgical and medical supplies as well as medication must be paid for by the patients.

'[T]he social security system in Pakistan takes the form of charity (Zakat entitlement), though it requires quite lengthy procedures to subscribe to. Additionally, [...] coverage may be full if the treatment is available at public facility but not in private facilities.'12

1.3.2 A MedCOI response, dated 21 June 2018, described Zakat, noting:

'Under the system of Zakat, funds for the medical treatment of the "deserving", or mustahiq, patients, are distributed to various health facilities. Only a Muslim citizen of Pakistan living below the poverty line is eligible to receive Zakat. A person can apply to the regional Zakat department and if successful, will receive a Istehqaq certificate from the Local Zakat Committee in the area. The certificate is then submitted to the Health Welfare Committee at the hospital in question. The financial assistance can be used for "medicines, tests, artificial limbs, medical treatment including operation, bed in general ward and free transportation of the patient", according to the Zakat and Ushr Department in Punjab province. Zakat funds are available at various hospitals.'13

1.3.3 The MedCOI response, dated 29 January 2020, noted:

'A project in Khyber Pakhtunkhwa and parts of Islamabad is providing 'health cards to ensure government-subsidised health insurance for poor and needy families'. The Sehat Sahulat Program provides 'significant financial coverage, and province-wide accessibility to secondary and tertiary

<sup>&</sup>lt;sup>10</sup> Indus Hospital, 'Indus Health Network', nd

<sup>&</sup>lt;sup>11</sup> News International, 'Neither private nor public hospitals providing quality...', 26 December 2019

<sup>&</sup>lt;sup>12</sup> MedCOI, 29 January 2020

<sup>13</sup> MedCOI, 21 June 2018

treatment facilities.' This model was built to align with Pakistan's commitment to introduce Universal Health Coverage (UHC) by 2030. Achieving UHC is part of Pakistan's sustainable development goals.

'In 2017 a health insurance scheme was launched in the federal capital, FATA and Punjab to provide coverage for families earning USD 2 per day or less. Families included in the scheme are entitled to an annual treatment costing USD 2,600. This can include conditions and treatments like cancer, traumas caused by accidents, burns, complications from diabetes, infections and bypass surgeries.'14

- 1.3.4 The Prime Minister's National Health Programme, known as the Sehat Sahulat Program (SSP), benefitted people living below the poverty line, persons with disabilities (residing in Azad Jammu and Kashmir, Gilgit Baltistan, Islamabad Capital Territory and Punjab) and transgender persons (across Pakistan)<sup>15</sup>. The SSP was described as '[A] milestone towards social welfare reforms; ensuring that the identified under-privileged citizens across the country get access to their entitled medical health care in a swift and dignified manner without any financial obligations. The SSP program's objective is to improve access of the poor population to good quality medical services, through a micro health insurance scheme.' 16
- 1.3.5 The BTI 2020 report noted, in regard to the SSP:
  - 'Initially it applied mainly to parts of the Punjab and to Balochistan and FATA [Federally Administrated Tribal Areas]; however, in early 2018, it was expanded further to a total of 38 districts and had over 3 million persons enrolled. There has been some criticism of the program, describing the fundamental health care problem as one of an insufficient production of health care services for underserved populations, but a more systematic assessment of this health insurance program is needed.'<sup>17</sup>
- 1.3.6 As of August 2020, the SSP reportedly covered for up to PKR 60,000 of treatment expenses per family per year, which included inpatient medical and surgical procedures, emergency treatment, maternity care, post-hospital treatment and transportation costs. In addition, cover for up to PKR 300,000 was available to cover treatment for burns, following road traffic accidents, diabetes, cardiovascular diseases, cancer, kidney and liver diseases, HIV and hepatitis and neurosurgical procedures<sup>18</sup>.
- 1.3.7 The SSP provided a list of '<u>Diseases cover under the program</u>'.
- 1.3.8 According to a MedCOI response, dated 6 September 2018, which referred to the SSP, treatment costs were covered in public or private hospitals<sup>19</sup>.
- 1.3.9 The Pakistan Economic Survey for 2019-2020 noted 'According to PMU [Project Management Unit] officials, the SSP programme achieved an overall enrollment of 59 percent of households up to December 2019 in the country.

<sup>&</sup>lt;sup>14</sup> MedCOI, 29 January 2020

<sup>&</sup>lt;sup>15</sup> SSP, 'Frequently Asked Questions', nd

<sup>&</sup>lt;sup>16</sup> Sehat Sahulat Program, 'About the program', nd

<sup>&</sup>lt;sup>17</sup> Bertelsmann Stiftung, 'BTI Pakistan Country Report 2020', 2020, last accessed: 15 June 2020

<sup>&</sup>lt;sup>18</sup> Sehat Sahulat Program, 'About the program', nd

<sup>&</sup>lt;sup>19</sup> MedCOI, 6 September 2018

Whereas, the programme has almost reached the target of 60 percent enrolment in AJK, GB, and Khyber Pakhtunkhwa's merged districts. The patient satisfaction survey showed 97.5 percent satisfaction rate.'20

1.3.10 The MedCOI response, dated 29 January 2020, noted:

'Microloans can sometimes include mandatory accident and health insurance. Microinsurance is a growing field in Pakistan and there are currently 150 hospitals all over Pakistan listed for health microinsurance clients. There are also examples of community health insurance, but due to the costs of administrating policies in remote areas, the premiums are unaffordable.'21

**Back to Contents** 

#### 1.4 Public sector

1.4.1 WHO EMRO noted in regard to the public health sector:

'Public sector health care system endeavors to deliver healthcare through a three level healthcare delivery system and a range of public health interventions. The first level includes Basic Health Units (BHUs) and Rural Health Centers (RHCs) founding the fundamental of the primary healthcare model, secondary care encompassed first and second referral facilities providing acute, ambulatory and inpatient care through Tehsil Headquarter Hospitals (THQs) and District Headquarter Hospitals (DHQs) and tertiary care including teaching hospitals.

- "...The numbers of doctors, dentist, nurses and LHVs [Lady health care visitors] have increased and availability of one doctor, dentist, nurse and one hospital bed versus population has gradually improved."
- 1.4.2 Pakistan Today, a Pakistani English-language daily newspaper, reported in January 2020 that the public sector served 30% of the population of Pakistan<sup>23</sup>.
- 1.4.3 The Government of Pakistan runs the Expanded Programme on Immunisation (EPI) which 'aims to vaccinate children aged 0-15 months against ten Vaccine Preventable Diseases (VPDs) and pregnant women.'24 See also Healthcare facilities – <u>Public</u>

**Back to Contents** 

### 1.5 Private sector

1.5.1 WHO EMRO noted on the private sector:

'The private health sector constitutes a diverse group of doctors, nurses, pharmacists, traditional healers, drug vendors, as well as laboratory technicians, shopkeepers and unqualified practitioners.

"...The rising population pressure on state health institutions has allowed the private sector to bridge the gap of rising demand and limited public health

<sup>&</sup>lt;sup>20</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p218), 2020

<sup>&</sup>lt;sup>21</sup> MedCOI, 29 January 2020

<sup>&</sup>lt;sup>22</sup> WHO EMRO, 'Pakistan Health Service Delivery', nd

<sup>&</sup>lt;sup>23</sup> Pakistan Today, 'Pakistan's healthcare system', 8 January 2020

<sup>&</sup>lt;sup>24</sup> Government of Pakistan, 'Expanded Program on Immunization', nd

facilities. A number of private hospitals, clinics and diagnostic labs has increased considerably and is contributing health services in the country. Majority of private sector hospitals has sole proprietorship or a partnership model of organization. Stand-alone clinics across Pakistan are the major providers of out-patient care majority of these clinics falls in the sole proprietorship category.'25

1.5.2 Pakistan Today noted in January 2020 that the healthcare system's private sector served 70% of the population<sup>26</sup>.

See also Healthcare facilities – Private

**Back to Contents** 

- 1.6 Non-government organisation (NGO) provision and assistance
- 1.6.1 The BTI 2020 report noted:

'Pakistan has a vast array of associations and organizations representing the interests of different communities. These include trade unions, student unions, bar associations, peasant organizations, journalist unions and charity organizations. Welfare associations, both formal and informal, are a significant source of social support, often filling a governance vacuum or providing a social safety net. Such third-sector entities also play a prominent role in providing emergency services and health care.'<sup>27</sup>

1.6.2 MedCOI noted, in a response dated 29 January 2020, 'Charity hospitals may also provide free healthcare to the underprivileged. One chain of hospitals described in an article by Andalou Agency is said to provide care from the primary level up to cardiac surgery and treatment for pediatric cancer.'28

**Back to Contents** 

Section 2 updated: 3 September 2020

- 2. Healthcare facilities
- 2.1 Hospitals
- 2.1.1 For a list of government-run (public) and private hospitals, see the healthcare platform Marham and the property portal Graanablog. The UK Foreign and Commonwealth Office (FCO) also provided a list of hospitals with English-speaking doctors.

**Back to Contents** 

- 2.2 Public
- 2.2.1 The Pakistan Bureau of Statistics released a report in 2019, in which it recorded there were a total of 1,279 hospitals; 5,671 dispensaries, 747 MCH (maternal and child healthcare) centres, 441 tuberculosis centres, 686 rural

<sup>&</sup>lt;sup>25</sup> WHO EMRO, 'Pakistan Health Service Delivery', nd

<sup>&</sup>lt;sup>26</sup> Pakistan Today, 'Pakistan's healthcare system', 8 January 2020

<sup>&</sup>lt;sup>27</sup> Bertelsmann Stiftung, 'BTI Pakistan Country Report 2020', (p13), 2020

<sup>&</sup>lt;sup>28</sup> MedCOI, 29 January 2020

- health centres; 263 sub-health clinics and 5,264 basic health centres across Pakistan in 2018, with a combined total of 132,227 beds<sup>29</sup>.
- 2.2.2 Export.gov's Healthcare Resource Guide noted 'Despite an elaborate and extensive health infrastructure, health care delivery suffers from some key issues such as, high population growth, uneven distribution of health professionals, deficient workforce, insufficient funding, and limited access to quality healthcare services.'30
- 2.2.3 The Pakistan Economic Survey 2019-20 recorded the total number of registered medical personnel as of 2019:
  - 233,261 doctors
  - 24,930 dentists
  - 112,123 nurses
  - 41,810 midwives
  - 20,565 Lady Health Visitors<sup>31</sup>.
- 2.2.4 In its undated profile on Pakistan, WHO EMRO noted there were more than 95,000 Lady Health Workers (LHWs) providing primary health care services to the community<sup>32</sup>.
- 2.2.5 In 2018, the ratio of medical personel to people was recorded as 1 doctor per 963 persons, 1 dentist per 9,413 persons and 1 hospital bed per 1,608 persons<sup>33</sup>. The Economic Survey for 2019-20 did not include any figures on ratios<sup>34</sup>
- 2.2.6 The below table is replicated, from the Pakistan Bureau of Statistics Gender report, to show the number of public health facilities by type and beds in both urban and rural areas, as of 2018<sup>35</sup>:

Type of	Urb	an	Rur	al	All A	reas
facility	No. of facilities	No. of beds	No. of facilities	No. of beds	No. of facilities	No. of beds
Hospital	1,110	105,444	169	7,706	1,279	113,150
Dispensaries	1,739	785	3,932	426	5,671	1,211
TB centres	302	198	139	0	441	198
MCH centres	441	311	306	26	747	337
RH centres	127	2,067	559	8,508	686	10,575

<sup>&</sup>lt;sup>29</sup> Pakistan Bureau of Statistics, 'Compendium on gender statistics of Pakistan', (p24), 2019

<sup>30</sup> Export.gov, 'Healthcare Resource Guide: Pakistan', 4 November 2019

<sup>31</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p216), 2020

<sup>32</sup> WHO EMRO, 'Pakistan Health Service Delivery', nd

<sup>&</sup>lt;sup>33</sup> Government of Pakistan, 'Pakistan Economic Survey 2018-2019', (p173), 2019 <sup>34</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', 2020

<sup>35</sup> Pakistan Bureau of Statistics, 'Compendium on gender statistics of Pakistan' (p24), 2019

Basic Health Units	80	73	5,184	6,549	5,264	6,622
SHCs	42	0	221	134	263	134
Total	3,841	108,878	10,510	23,349	14,351	132,227

**Back to Contents** 

## 2.3 Private

- 2.3.1 MedCOI noted in January 2020 that most private health facilities in Pakistan were in urban areas<sup>36</sup>.
- 2.3.2 Export.gov's Healthcare Resource Guide noted 'The private sector plays a vital role in the delivery of healthcare services in Pakistan. Most private hospitals, clinics, and health related facilities are in urban areas and are well-equipped with modern diagnostic facilities. These private healthcare options are in greater demand than healthcare available through the public sector.'37

**Back to Contents** 

Section 3 updated: 3 September 2020

### 3. Covid-19

3.1.1 For statistics, guidelines and designated facilities, see the Pakistan Government's website on Covid-19.

**Back to Contents** 

Section 4 updated: 3 September 2020

## 4. Medical Conditions

#### 4.1 Cancer

- 4.1.1 The WHO Global Cancer Observatory noted that in 2018, there were 173,937 new cases of cancer across both sexes and all ages. A further breakdown showed 34,066 (19.6%) new cases of breast cancer; 18,881 (10.9%) new cases of lip, oral cavity (cancer in the mouth or lips); 9,771 (5.6%) new cases of lung cancer; 7,953 (4.6%) new cases of oesophagus cancer and 7,139 (4.1%) new cases of leukaemia. The remaining 96,127 (55.3%) were other types of cancer<sup>38</sup>.
- 4.1.2 The American Institute for Cancer Research reported that, as of 2018 Pakistan, had the second highest rate in the world for lip and oral cavity cancers<sup>39</sup> (see also <u>Dental treatment</u>).
- 4.1.3 The Pakistan Health Research Council (PHRC), part of Pakistan's Ministry of National Health Services, Regulations and Coordination, noted:

'Cancer is major public health problem for Pakistan where annually about 148,000 new cancer cases are diagnosed and almost 100,000 die due to cancer. The most common cancers [drawn from 2015-2016 figures] in

<sup>&</sup>lt;sup>36</sup> MedCOI, 29 January 2020

<sup>&</sup>lt;sup>37</sup> Export.gov, 'Healthcare Resource Guide: Pakistan', 4 November 2019

<sup>38</sup> WHO, 'Global Cancer Observatory Pakistan 2018', May 2019

<sup>39</sup> World Cancer Research Fund, Mouth, pharynx & larynx cancer statistics, 2018

Pakistan are oral, lung, liver, breast, cervical and blood/bone-marrow cancer. The major risk factors for cancer include smoking, physical inactivity, unhealthy diet, infections (hepatitis B/C, Human Papilloma virus) and exposure to toxins. All these can be prevented by adopting health life style and appropriate vaccinations...

'In order to prevent and control Cancers, there is need to establish the Cancer Registry. To date we [Government of Pakistan] do not have any National Cancer Registry which can provide the true nature of problem to formulate health policy.'40

4.1.4 The News International, a Pakistani national newspaper noted in February 2019:

'Cancer that has emerged as a major health threat in Pakistan has never been given due attention by the concerned government authorities as the facilities of screening and early detection of cancers along with treatment and even palliative care are not available in public sector healthcare facilities almost all across the country.

'Pakistan does not have National Cancer Registry in the absence of which it is hardly possible to assess the true nature of problem though according to estimates, well over 300,000 new individuals suffer from cancer every year in the country and the disease claims well over 50,000 lives every year. Data available at teaching hospitals show the existing pool of cancer patients is on the rise sharply.

'The most alarming fact is that in Pakistan, only minority of cancer patients are able to get treatment and that too in five to eight major cities of the country while population in smaller cities and peripheries do not have any screening or treatment facilities.'41

- 4.1.5 'UNMOL', a Patient Support Programme (PSP) to increase access to cancer medicines, was launched by Roche, a Swiss multinational healthcare company, in partnership with the Government of Pakistan<sup>42</sup>. In August 2018 it was reported that the PSP offered:
  - '... sustainable financial solutions for those in need of oncology treatment by supporting patients unable to complete their treatment and those that cannot afford even a single treatment cycle. Partially affording patients are supported with a number of treatment cycles based on their financial status. For those who are completely non-affording patients, Roche and the Pakistan Federal Government cover the entire treatment free of cost.'<sup>43</sup>
- 4.1.6 The Pakistan Atomic Energy Commission (PAEC) has 18 medical centres in 4 provinces providing diagnostic and treatment facilities to cancer patients, either free of charge or at subsidized rates<sup>44</sup> <sup>45</sup>.

<sup>&</sup>lt;sup>40</sup> PHRC, 'Cancer awareness campaign', nd

<sup>&</sup>lt;sup>41</sup> The News, 'Pakistan severely lacks diagnostic, treatment and palliative care...', 3 February 2019

<sup>&</sup>lt;sup>42</sup> Roche, 'Addressing the lack of cancer care in Pakistan', August 2018

<sup>&</sup>lt;sup>43</sup> Roche, 'Addressing the lack of cancer care in Pakistan', August 2018

<sup>&</sup>lt;sup>44</sup> PAEC, 'Cancer hospitals', nd

<sup>&</sup>lt;sup>45</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p221), 2020

- 4.1.7 A MedCOI response, dated 2 February 2019, noted that oncology treatment was available at Shaukat Khanum Memorial Cancer Hospital and Research Centre, Peshawar and Shifa International Hospital, Islamabad, both of which were private facilities<sup>46</sup>.
- 4.1.8 According to a MedCOI response on accessibility to cancer treatment, published 6 September 2018:
  - 'Shaukat Khanum Memorial Cancer Hospital and Research Centre Lahore, Punjab promises "free treatment" for cancer patients. The health facility "aims to provide top quality diagnostic and treatment facilities to cancer patients, irrespective of their ability to pay". [A] cancer specialist working in the hospital explained [...] that the policy of the hospital is not to offer free treatment to patients who already started their treatment somewhere else.'47
- 4.1.9 The same response noted, in regard to outpatient treatment and follow up by an oncologist, that consultation with an oncologist in Lahore, Punjab, costs between PKR 100 and 2,000<sup>48</sup>.
- 4.1.10 Referring to the cost of cancer care and medication, the MedCOI response added:

'In "The Financial Burden of Cancer: Estimates from Patients Undergoing Cancer Care in a Tertiary-Care Hospital", 2012; the authors report that the mean and median monthly cost of cancer care in Pakistan was \$1093.13 and \$946.42 respectively. And the overall average duration for all cancers was 6.7 months.

'In another news article from 2017, it is mentioned that a patient in Pakistan suffering from bone marrow cancer had to pay PKR 476,000 a month for treatment. The head of the Oncology Department at Pakistan Institute of Medical Sciences (PIMS) told the newspaper that "medication for the disease can cost a patient anywhere between Rs 3.5 million per year and Rs 500,000 per month".

'According to the study "Availability of anticancer medicines in public and private sectors, and their affordability by low, middle and high income class patients in Pakistan" public health insurance coverage is inadequate. Because of this, a large part of the population have to pay for their healthcare out of their own pocket. Pricing of medicines in Pakistan is regulated by the Drug Regulatory Authority of Pakistan (DRAP) but there appears to exist no transparent price calculation formula. The study concludes that "the affordability of anticancer medicines is a grave problem for most of the Pakistani patients" and "the expenses pertaining to healthcare are unaffordable for an average income person".'49

4.1.11 In regard to access to chemotherapy, the September 2018 MedCOI response stated:

'Ittefaq Hospital in Lahore, Punjab charges between PKR 6,000 - 10,000 for chemotherapy treatment. The pricelist is dated "2013-2014", but the hospital

<sup>&</sup>lt;sup>46</sup> MedCOI, 2 February 2019

<sup>&</sup>lt;sup>47</sup> MedCOI, 6 September 2018

<sup>&</sup>lt;sup>48</sup> MedCOI, 6 September 2018

<sup>&</sup>lt;sup>49</sup> MedCOI, 6 September 2018

has confirmed [...] that the price is still valid. The cost is also only doctor's fees, medicine prices not included.

'According to a study conducted by interviewing patients of the public facilities Mayo hospital and Jinnah hospital in Lahore, Punjab, "chemotherapy drugs were available free of cost in the Mayo hospital, but they had to purchase them from open market whenever these were out of stock'. However, chemotherapy costs were found to be about 50 times higher in Jinnah hospital compared to the Mayo hospital.'50

- 4.1.12 As at September 2018, the prices of laboratory tests for Chronic Myeloid Leukaemia at the private Chugthai lab in Lahore, Punjab were as follows:
  - Absolute Lymphocytes Count: PKR 180
  - Lymphocytes Subset Analysis: PKR 30,000
  - Blood C/E (Complete, CBC): PKR 600
  - Immunophenotyping by Flowcytometry: PKR 35,000
  - BCR-ABL By PCR: PKR 16,000
  - 3D Haematology by blood smear: PKR 1,850
  - Bone Marrow Biopsy (Procedure & Reporting): PKR 5,000<sup>51</sup>

**Back to Contents** 

### 4.2 Cardiovascular disease

- 4.2.1 WHO non-communicable Diseases (NCD) Country Profile for Pakistan noted that in 2016, proportional mortality rate was at 29% for cardiovascular diseases<sup>52</sup>.
- 4.2.2 In September 2020, The News International, which is the largest English-language online newspaper based in Pakistan, noted that, according to cardiologists, heart diseases have become the leading cause of deaths in Pakistan, often due to lifestyle choices<sup>53</sup>. Professor Khawar Kazmi, head of Preventive Cardiology Department, National Institute of Cardiovascular Diseases, told The News:

"[T]he daily death rate due to heart diseases comes to a staggering 1,115 people, mostly due to heart attacks, which can, fortunately be prevented by lifestyle modifications," adding that the 'Non-Communicable Diseases (NCDs) including cardiovascular diseases now account for 58 percent of total deaths in Pakistan.'54

4.2.3 A MedCOI response dated November 2019 noted that the following treatments and procedures were available at the Aga Khan University Hospital, Karachi and the Shifa International Hospital, Islamabad, both private facilities:

<sup>&</sup>lt;sup>50</sup> MedCOI, 6 September 2018

<sup>&</sup>lt;sup>51</sup> MedCOI, 6 September 2018

<sup>52</sup> WHO, 'Pakistan Fact Sheet', 2016

<sup>53</sup> The News, '46 people dying of heart diseases in Pakistan every hour', 30 September 2018

<sup>&</sup>lt;sup>54</sup> The News, '46 people dying of heart diseases in Pakistan every hour', 30 September 2018

- Cardiac Surgery of Catherer Ablation [removing a faulty electrical pathway of the heart]
- Electrical cardioverions procedures
- Outpatient/Inpatient treatment by a cardiac surgeon<sup>55</sup>.
- 4.2.4 A MedCOI response in December 2019 noted the following treatments and procedures as available at the Aga Khan University Hospital and the Rawalpindi Institute of Cardiology (public facility):
  - Inpatient, outpatient treatment and follow up by a cardiologist
  - Placement of an Implantable Carioverter Debribilator [ICD]
  - Coronary Artery Bypass Grafting
  - Coronary Angioplasty [including a follow up]
  - Heart Valve Surgery<sup>56</sup>.
- 4.2.5 A MedCOI response in February 2020 listed the following treatments and procedures as available at the Aga Khan University Hospital and the Shifa International Hospital:
  - Outpatient treatment and follow up by a cardiologist
  - Diagnostic imaging by means of ultrasound of the heart (echocardiography)
  - Diagnostic imaging: ECG (electro cardio gram; cardiology)
  - Inpatient treatment by a cardiologist
  - Inpatient treatment by a cardiac surgeon
  - Outpatient treatment and follow up by a cardiac surgeon<sup>57</sup>.
- 4.2.6 According to a MedCOI response, dated 31 January 2020, on treatment costs by a cardiologist: public outpatient or inpatient per treatment PKR 1,000 and private outpatient or inpatient per treatment PKR 2,500, adding that in all cases, patients must pay 'out of pocket.'58
- 4.2.7 Referring to paediatric cardiac surgery, a MedCOI response dated 29 January 2020, noted:

'Each year, about 50,000-70,000 children are born with congenital heart defects, and almost 25% are in need of surgery within the first year. There are no specialised Children's Heart Hospitals in Pakistan, according to the Pakistan Children Heart Foundation. A pediatric interventional cardiologist was quoted in a newspaper article to say: "A fully functional, state-of-the-art centre with doctors who are specifically trained for such pediatric cases [congenital heart diseases] does not exist in our country," laments Dr Hasan. "Children's Hospital in Lahore is the only exception. The rest of the country has three centres that have this facility, including Karachi's National Institute

<sup>&</sup>lt;sup>55</sup> MedCOI, 28 November 2019

<sup>&</sup>lt;sup>56</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>57</sup> MedCOI, 4 February 2020

<sup>&</sup>lt;sup>58</sup> MedCOI, 31 January 2020

for Cardiovascular Diseases (NICVD) and Agha Khan University Hospital (AKUH)". Information from Aga Khan University confirms that 4 facilities in the country can perform surgery on patients with congenital heart diseases.

'The country has about 21-25 trained pediatric cardiologists and 4-8 pediatric cardiac surgeons, as the exact number varies slightly according to different sources. Most trained Pakistani surgeons leave the country for countries with better pay and better quality of life, though some are said to be returning to Pakistan. According to the Pakistan Children Heart Foundation, this results in long queues, with 9,000 patients waiting for surgery and 25-30 new cases added to the list each week. According to the Head of Paediatric Cardiology, National Institute of Cardiovascular Diseases (NICVD), 22,000 surgeries need to be performed each year, but only 4,000 are performed each year.

'Due to long wait times, many who can afford go to India for treatment. There may also be other reasons – a patient with Tetralogy of Fallot was advised to seek treatment in India, because although the procedure could be done in Pakistan, the post-operative care was according to the treating doctor not adequate. However, the political tension between the country means it can sometimes be difficult for Pakistani families to obtain a visa.'59

- 4.2.8 In a response dated 29 January 2020, MedCOI quoted outpatient treatment costs by a paediatric cardiologist: PKR 2,000 (National Institute of Cardiovascular Diseases (NICVD), Karachi public) and PKR 4,250 (Aga Khan Hospital, Karachi private)<sup>60</sup>.
- 4.2.9 The same response quoted treatment costs (including additional fees, such as bed, materials, etc) for paediatric heart surgery in public and private facilities: closure of ventricular septal defect PKR 300,000 (NICVD, Karachi); PKR 700,000 (Aga Khan Hospital, Karachi); and for paediatric heart surgery: removal of pulmonary artery banding PKR 145,000 (NICVD, Karachi); PKR 300,000 (Aga Khan Hospital, Karachi)<sup>61</sup>.
- 4.2.10 The MedCOI response further added:

'The Aga Khan University Hospital can via its Congenital Heart Disease Fund pay for some patients with congenital heart diseases who cannot afford treatment. In 2017, the Fund distributed PKR 85,000,000 among 342 patients with congenital heart diseases. The National Institute of Cardiovascular Diseases (NICVD) in Karachi has a 75-bed pediatric unit and a 14-bed pediatric intensive care unit (PICU) for post-surgical management and provides free services for children with congenital heart diseases. During a 6 month study of the PICU in 2018-2019, closure of ventricular septal defect was the second most performed procedure at the institute. Pulmonary artery (PA) banding was also performed.

'As comparative number for treatment abroad; surgery for Tetralogy of Fallot cost PKR 800,000 in India while the same procedure in Pakistan cost PKR 1,100,000.'62

<sup>&</sup>lt;sup>59</sup> MedCOI, 29 January 2020

<sup>60</sup> MedCOI, 29 January 2020

<sup>61</sup> MedCOI, 29 January 2020

<sup>62</sup> MedCOI, 29 January 2020

#### 4.3 Dental treatment

4.3.1 The Eastern Mediterranean Health Journal at WHO noted in 2016:

'In Pakistan, the limited availability of oral health care and the high level of unmet oral health care needs are well documented. The recorded prevalence of dental caries is 50–70% and that of oral cancer is among the highest in the world. Although oral health care has been declared to be part of the primary health care system, oral health disparities between rich and poor, and emerging problems of access to and use of appropriate care have never been addressed, reflecting a lack of awareness among both patients and health system decision-makers.'63

- 4.3.2 The Journal of the Pakistan Dental Association, which is a leading journal for dentistry in Pakistan, commented, in January 2018, on the main issues for dentists:
  - 'Access to health is considered a basic human right; the public sector and the non-government organizations are striving to provide round the clock health cover to its population. It may be inadequate, but, the effort is there. Yet, there is no national or provincial oral healthcare policy or program. The sporadic dental cover in some health care facilities is available only in the mornings with little or no equipment, instrument and material support.
  - 'Majority of the adult population and more than half the child population has dental decay; over 80% of the people over 45 years of age have periodontal disease; and more than 20% of the population over 60 is edentulous. We have one of the highest rate of oral cancer in the world.
  - 'More than 90% of all dental disease in untreated; only 6% edentulous wear dentures and late reporting of oral cancer is highly prevalent. There is probably a major divide in the unmet needs of high income group and the low income population; as 90% of the dental facilities are located in upper and upper middle class areas leaving the low income areas at the mercy of unqualified practitioners.
  - 'We can safely envisage that less than 5% of the Pakistani's have access to complete dental care and more than half of the entire population has never visited a dental surgeon.
  - "...Public Health sector is marred by lack of appropriately trained manpower, equipment and material; private sector is financially out of reach for majority of the population; most of the health insurances and company health cover allow very basic dental treatment, restricted in majority of the cases to emergency pain relief, "Gum Treatment" and extractions. Hence, majority of the population has to dig into their already shallow pockets for dental care."
- 4.3.3 The Punjab Dental Hospital offered various dental procedures.

 <sup>&</sup>lt;sup>63</sup> WHO EMRO, 'Primary oral health care: a missing link in public health in Pakistan', 2016
<sup>64</sup> Journal of the Pakistan Dental Association, 'Dentistry in Pakistan-Standing at the Crossroads Facing Numerous Challenges with an Uncertain Future', January 2018

#### 4.4 Diabetes

- 4.4.1 The International Diabetes Federation estimated that, as of 25 February 2020, the total cases of diabetes in adults in Pakistan was 19,369,800<sup>65</sup>.
- 4.4.2 The WHO Global Tuberculosis Report 2019 indicated that 13% of men and 12% of women in Pakistan had diabetes<sup>66</sup>.
- 4.4.3 The PHRC Non-communicable Diseases Risk Factors Survey, conducted between November 2013 and April 2014, noted 'With 11% prevalence of diabetes in Pakistan the country is the sixth in the world having high diabetes.'67
- 4.4.4 The Diabetes Centre, with clinics in Islamabad and Lahore, provided comprehensive preventive, promotive, curative and rehabilitative services for diabetes patients, irrespective of their ability to pay<sup>68</sup>.
- 4.4.5 The Diabetes Association of Pakistan, Karachi, noted that it provided '[F]ree of cost services to the poor and deserving men, widows, orphans and children, medical care and consultation, hypoglycaemic agents, Insulin injections, advice on diet control and education on diabetes. "Foot Care Clinic" provides consultation and treatment of infection due to diabetes."
- 4.4.6 A MedCOI response, dated 28 May 2020, noted that outpatient treatment by a general practitioner was available at the private facilities of Aga Khan University Hospital and Shifa International Hospital, as well as:
  - Blood glucose meter [for self use]
  - Blood glucose strips [for self use]
  - Laboratory research of blood glucose<sup>70</sup>.

**Back to Contents** 

# 4.5 Drug addiction

4.5.1 A MedCOI response dated 13 August 2019 reported on the accessibility and costs of treatment for drug addiction, including psychiatric treatment:

'A study published in 2016 states that "the country is lacking in offering modern opiate substitution, as well as Methadone and Buprenorphine therapy."

- psychiatric treatment of drug addiction in a specialized clinic (rehab.)

'In 2019, the province of Khyber Pakhtunkhwa opened its first drug rehabilitation centre for users of crystal meth and other drugs, where boarding, treatments and medications are offered to the patients free of charge.

<sup>65</sup> International Diabetes Federation, 'Pakistan', 25 February 2020

<sup>&</sup>lt;sup>66</sup> WHO, 'Global Tuberculosis Report 2019', (p154), 2019

<sup>&</sup>lt;sup>67</sup> PHRC, 'Non-Communicable Diseases Survey', (p3), 2016

<sup>68</sup> The Diabetes Centre, nd

<sup>69</sup> Diabetes Association of Pakistan, 'About DAP', nd

<sup>&</sup>lt;sup>70</sup> MedCOI, 28 May 2020

'According to the website of the Ministry of Narcotics Control, treatment in public services for heroin addiction in Pakistan is free of charge. All district hospitals are mandated to have one ward exclusively for treatment of drug addicts. These wards however only provide detoxification facilities.' To meet with the rising demand of drug addiction treatment, the Government has been setting up Model Addiction Treatment and Rehabilitation Centres.

For the region of Khyber Pakhtunkhwa, there's a government addiction rehabilitation centre available in Islamabad. The centre has a capacity of 45 beds and provides "free treatment, food, boarding and rehabilitation to drug addicts."

'According to a newspaper article from 2018, private rehab centres can offer different "packages" ranging from PKR 1,000 rupees to PKR 10,000 a day. "The packages depend on the financial capacity of the patient's guardian and offer facilities like a separate room, better food and an individual caretaker."

'Safe Care Trust International (SCTI) is a psychiatric and drug rehabilitation centre in Islamabad. They help the vulnerable people living in the neighborhood of SCTI or in the remote areas of Pakistan at little or no cost. "About 65% of the patients are being charged a nominal per month fee of food and accommodation, other services such as medication, counseling, nursing care and medical care services free of cost. The patients are provided treatment and rehabilitation including medication, counseling/psychotherapy, indoor games and nursing care."

'Non-profit rehabilitation centres like Caravan of Life in Islamabad offer free or low cost treatment for impoverished patients.

'The low cost, non-profit organisation "Caravan of Life" in Islamabad provides out-patient services to those individuals who are no longer in need of the day program services. Zakat funding is paying for patients who would otherwise not be able to afford treatment.

'According to a news article, "the fee of a psychiatrist on an average ranges from 500 rupees to 3,000 rupees for a single session. This, combined with medicines, make the cost of treatment unaffordable for an average person. Although public hospitals provide psychiatric treatment with nominal or no charges, many people prefer private treatment due to the disparity between public and private hospitals."

'According to a news article from Al Jazeera, inpatient treatment by a medical doctor for drug addiction is about PKR 125,000 a month.

'At the non-profit organization "Caravan of Life" in Islamabad, "consultant Psychiatrists are available during selected day and evening hours. Zakat funds are available for the treatment of Charity Patients. As the organization is a not for Profit, paying patients, will be charged noncommercial rates."

'Shafique Psychiatric Clinic in Peshawar has two psychotherapists available: per-session charges: PKR 1500 (can vary) per session duration: 45 min.

'Khusro Elley is the director of a psychiatric hospital in Karachi, Pakistan, which provides free treatment for the mentally ill.

'Clinical psychologists are working at the non-profit drug rehabilitation centre "Caravan of Life" in Islamabad. "Zakat funds are available for the treatment of Charity Patients. As the organization is a not for Profit, paying patients, will be charged noncommercial rates." <sup>71</sup>

See also Mental health for further information on psychiatric treatment.

**Back to Contents** 

- 4.6 Gastroenterology, internal medicine and diagonostic imaging
- 4.6.1 In February 2020 MedCOI noted that gastroenterological care/treatment such as tube feeding (naso-gastric) and gastroenterological care/treatment such as tube feeding (PEG) was available at the Aga Khan University Hospital Stadium Road, Karachi and the Shifa International Hospital, Islamabad, both private facilities <sup>72</sup>. A dietician was available at the same facilities <sup>73</sup>.
- 4.6.2 In January 2020 it was noted by MedCOI that inpatient, outpatient treatment and follow up by a gastroenterologist and gastrointestinal surgery was available at the Aga Khan University Hospital, Karachi and the Shifa International Hospital, Islamabad<sup>74</sup>.
- 4.6.3 A MedCOI response, dated December 2019, noted that at the Aga Khan University Hospital in Karachi and the Shifa International Hospital in Islamabad, the following treatments were available:
  - Outpatient treatment and follow up by a general practitioner
  - Inpatient treatment by an internal specialist (internist)
  - Outpatient treatment and follow up by an internal specialist (internist)
  - Inpatient treatment by an infectiologist
  - Outpatient treatment and follow up by an infectiologist<sup>75</sup>.
- 4.6.4 Inpatient, outpatient and follow-up treatment by an endocrinologist was available at Aga Khan University Hospital, Karachi and Shifa International Hospital, Islamabad<sup>76</sup>.
- 4.6.5 MedCOI further reported in December 2019 that diagnostic imaging by means of ultrasound was also available at the Aga Khan University Hospital Stadium Road in Karachi and the Shifa International Hospital in Islamabad<sup>77</sup>.
- 4.6.6 MedCOI noted in September 2018 that diagnostic imaging by means of computed tomography (CT scan) and diagnostic imaging by means of MRI were available at the Aga Khan University Hospital Stadium Road in Karachi and the Shifa International Hospital in Islamabad<sup>78</sup>.

<sup>&</sup>lt;sup>71</sup> MedCOI, 13 August 2019

<sup>&</sup>lt;sup>72</sup> MedCOI, 19 February 2020

<sup>&</sup>lt;sup>73</sup> MedCOI, 31 January 2020

<sup>74</sup> MedCOI, 6 January 2020

<sup>75</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>76</sup> MedCOI, 21 December 2019

<sup>77</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>78</sup> MedCOI, 4 September 2018

#### 4.7 Geriatrics

4.7.1 MedCOI noted on 28 May 2020 that geriatric care, 24/7 care in a nursing home and sheltered housing for the elderly was available at the private facility Edhi Homes, Karachi<sup>79</sup>. Home assistance / care at home by a nurse, was provided by the Aga Khan University Hospital, Karachi and the Shifa International Hospital, Islamabad<sup>80</sup>.

**Back to Contents** 

# 4.8 Hepatitis

# 4.8.1 In July 2019 WHO reported:

'Approximately, 5 and 10 million people are affected with hepatitis B and C respectively in Pakistan. Thousands of new patients are added every year due to lack of prevention, testing and treatment resources as well as inadequately screened blood transfusion, improperly sterilized invasive medical devices and unsafe injections.

'...Although Pakistan produces cheaper medicines to cure hepatitis C infection, with a very low cost of US\$20 per cure within three months, very few people in the country know of their infection, and therefore, do not access testing and treatment services. The cost of cure for hepatitis C could be as high as US\$15,000 in a country like the US.

'Hepatitis B and C infections are transmitted primarily through blood and are key causes of liver cirrhosis and cancer.

- '...As most people living with hepatitis remain unaware, they could require repeated hospitalisation, expensive medicines and liver transplants, causing major financial burdens on their families as well as health systems. In many cases, patients die within 1–3 years as they get the access to testing and treatment very late. According to WHO, 23,720 people died of hepatitis-related causes in Pakistan in 2016, which compares to a bus full of 64 people every day.'81
- 4.8.2 For further information see Liver disease.
- 4.8.3 The Aga Khan University published an article in July 2019, stating:

'To curb the huge disease burden, the government has announced the Prime Minister's Programme for Hepatitis to eliminate viral hepatitis B and C infections from the country by 2030.

'...Thousands of people contract the disease every year due to lack of prevention, testing and treatment resources as well as inadequately screened blood transfusions, improperly sterilised invasive medical devices and unsafe injections. Aiming to provide leadership and coordination to provincial programmes, the Prime Minister's programme will include six key

<sup>&</sup>lt;sup>79</sup> MedCOI, 28 May 2020

<sup>80</sup> MedCOI, 28 May 2020

<sup>81</sup> WHO, '15 million people affected with hepatitis B and C in Pakistan...', 28 July 2019

interventions, including free screening of over 140 million people and new national plans for injection safety and safe blood transfusion.'82

- 4.8.4 The medical journal, BioMed Central (BMC) published an article in 2019, citing the number of infections of Hepatitis C by province:
  - Punjab 4,228,702;
  - Sindh 2,300,829;
  - Khyber Pakhtunkhwa 1,382,782;
  - Balochistan 491,446;
  - Azad Kashmir 161,051;
  - Islamabad Capital Territory 95,034;
  - Federally Administered Tribal Areas 30,898<sup>83</sup>.
- 4.8.5 In September 2018 it was noted by MedCOI that the following treatment was available at the Aga Khan University Hospital, Karachi and the Shifa International Hospital, Islamabad, both private facilities:
  - haematology: plasmapheresis
  - haematology: platelets / thrombocytes transfusion
  - inpatient, outpatient and follow-up treatment by a haematologist
  - laboratory research / monitoring of full blood count; e.g. Hb WBC & platelets<sup>84</sup>.

**Back to Contents** 

# 4.9 HIV/AIDS

4.9.1 The Pakistan Economic Survey for 2019-2020 noted:

'Since July 2019, Pakistan has been facing the challenge of HIV/ AIDS outbreak, which rose to over 160,000 positive patients in 2018. Approximately 6,400 died from the HIV/ AIDS disease up till September 2019. After the outbreak of HIV in Larkana, Sindh province of Pakistan has become one of the countries in the WHO Eastern Mediterranean Region where new HIV infections are increasing at an alarming level since 1987. HIV / AIDS programme aims for the Behavior Change Communication (BCC) strategy, services to high-risk population groups, treatment of Sexually Transmitted Infections (STIs), the supply of safe blood for transfusions, and capacity building of various stakeholders. Pakistan's epidemic is primarily concentrated among Injecting Drugs Users (IDUs) with a national prevalence of 27.2 percent (weighted prevalence of 37.8 percent); Hijrha (Transgender) Sex Worker (HSW) standing at 5.2 percent and 1.6 percent among Male Sex Worker (MSW). However, the prevalence in Female Sex Workers (FSWs)

<sup>82</sup> Aga Khan University, 'Pakistan announces ambitious plan to eliminate hepatitis', 28 July 2019

<sup>83</sup> BMC, 'Characterization of Hepatitis C virus epidemic in Pakistan', 2019

<sup>84</sup> MedCOI, 15 September 2018

- still remains low at 0.6 percent. The programme is technically supported by the UN agencies and Global Fund against AIDS, TB, and Malaria.'85
- 4.9.2 Following the outbreak of HIV in Larkana, Sindh, in April 2019, WHO noted: '[A] total of 30,192 people have been screened for HIV, of which 876 were found positive. Eighty-two per cent (719/876) of these were below the age of 15 years. During the screening, several risk factors were identified, including:

found positive. Eighty-two per cent (719/876) of these were below the age of 15 years. During the screening, several risk factors were identified, including: unsafe intravenous injections during medical procedures; unsafe child delivery practices; unsafe practices at blood banks; poorly implemented infection control programs; and improper collection, storage, segregation and disposal of hospital waste...

'A new HIV/AIDS ART Treatment Center for children has been established at Shaikh Zaid Children Hospital. Unauthorized laboratories, blood banks, and clinics have been closed.'86

4.9.3 Pakistan's National AIDS Control Programme noted there were 45 antiretroviral therapy (ART) <u>treatment centres</u> across Pakistan<sup>87</sup>. Anti-retroviral drugs (ARV's) were provided to all patients free of cost from the treatment centres<sup>88</sup>. The National AIDS Control Programme provided a list of ARVs available for adults and children<sup>89</sup>.

**Back to Contents** 

### 4.10 Liver disease

- 4.10.1 WHO reported in July 2019: 'The number of annual liver cancer cases reported at the Aga Khan University Hospital have increased three-fold over the past 20 years, informed Dr Adil Haider, dean of AKU Medical College.'90
- 4.10.2 An article on living donor liver transplantation, published July 2017, noted 'Until February 28, 2017, a total of 539 liver transplants have been performed in Pakistan....'. The report noted transplants had occurred at the following facilities: Shifa International Hospital, Islamabad; Shaikh Zayed Center of Liver Transplantation, Lahore; Army Liver Transplant Unit, Rawalpindi; Sindh Institute of Urology and Transplantation, Karachi; Dow University of Health Sciences, Karachi; and Gambat Institute of Medical Sciences, Sukkur<sup>91</sup>.
- 4.10.3 According to a MedCOI response, dated 28 November 2019, inpatient and outpatient treatment by a hepatologist was available at Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad, both private facilities<sup>92</sup>.
- 4.10.4 MedCOI reported in December 2019 that diagnostic research: transient elastography; test for liver fibrosis (e.g. Fibroscan) was available at the Aga

<sup>85</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (pp220-221), 2020

<sup>86</sup> WHO, 'HIV cases-Pakistan', 3 July 2019

<sup>87</sup> National AIDS Control Programme, 'HIV Treatment Services', nd

<sup>88</sup> National AIDS Control Programme, 'HIV Treatment Services', nd

<sup>89</sup> National AIDS Control Programme, 'HIV Treatment Services', nd

<sup>90</sup> WHO, '15 million people affected with hepatitis B and C in Pakistan...', 28 July 2019

<sup>91</sup> Bhatti, H., et al, 'Living Donor Liver Transplantation in Pakistan', July 2017

<sup>92</sup> MedCOI, 28 November 2019

Khan University Hospital, Karachi, the Shifa International Hospital, Islamabad and at Gastroenterology Associates, Islamabad, all of which are private facilities<sup>93</sup>. The Liver Foundation, based in Karachi, offered fibro scanning free of charge<sup>94</sup>.

**Back to Contents** 

#### 4.11 Malaria

#### 4.11.1 WHO EMRO noted:

'Pakistan shares the highest burden of major vector-borne diseases as malaria, leishmaniasis, dengue, Chikungunya and Crimean-Congo haemorrhagic fever.

'Like in other parts of the world malaria is a leading cause of morbidity and mortality in Pakistan. It is one of the 6 priority communicable diseases posing threat to the health of millions. With one million estimated and 300,000 confirmed reported cases each year [...] Malaria transmission in Pakistan has been traditionally seasonal and of unstable pattern. Intense transmission occurs in districts and agencies located in bordering regions with Islamic Republic of Iran and Afghanistan and along coastal belt in Sindh and Balochistan.'95

- 4.11.2 The PHRC Malaria Indicator Survey, conducted between August and November 2013, noted 'Malaria is typically unstable in Pakistan and almost all age groups are at risk of acquiring the infection. However, children below 5 years of age and pregnant women are at higher risk of infection. In Pakistan, Malaria transmission is seasonal, with peaks around September for vivax malaria and around October for falciparum malaria.'96
- 4.11.3 The Pakistan Economic Survey for 2019-2020 noted:

'According to Directorate of Malaria Control, more than 90 percent of disease burden in the country is shared by 56 highly endemic districts, mostly located in Balochistan (17 out of 32 districts), merged areas (7 districts), Sindh (12 districts) and Khyber Pakhtunkhwa (12 districts). Merged districts are the second-highest malaria-affected belt of the country, which accounts for 12-15 percent of total caseload in Pakistan.'97

4.11.4 According to the Directorate of Malaria Control's (DOMC) annual report for 2019, there were 3,818 fully functional public and private diagnostic centres (microscopy + rapid diagnostic test – RDT) in 72 districts<sup>98</sup>.

**Back to Contents** 

### 4.12 Mental health

4.12.1 According to the <u>WHO Mental Health Atlas 2017</u> profile for Pakistan, there were 11 psychiatric hospitals in the country, 800 psychiatric units in general

<sup>93</sup> MedCOI, 21 December 2019

<sup>94</sup> Liver Foundation, 'Our services', nd

<sup>95</sup> WHO EMRO, 'Malaria and other vector-borne diseases', nd

<sup>96</sup> PHRC, 'Malaria Indicator Survey', (pxvi), 2014

<sup>97</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p220), 2020

<sup>98</sup> DOMC, 'Pakistan Malaria Annual Report 2019' (p9), 2019

hospitals and 578 residential care facilities, all offering inpatient care<sup>99</sup>. As per the WHO's report, there are 3,729 outpatient mental health facilities in the country, of which 3 were for children and adolescents only<sup>100</sup>. There were 624 community-based (non-hospital) psychiatric outpatient facilities<sup>101</sup>.

4.12.2 A report published in 2020 on mental healthcare in Pakistan noted:

'Mental healthcare is provided mostly by public health sector although there have been some recent developments in the private sector as well. Psychiatric care offered by different sectors generally highlights the influence of the British allopathic system on psychiatric care. [...] There are around 400 qualified psychiatrists working in Pakistan. Most of the psychiatrists are working in urban cities although the posts of district psychiatrists have also been created throughout the country. Psychiatrists, in general, are working single handed, although major centers in the country are developing multidisciplinary services.' 102

4.12.3 In February 2020, The News International reported on mental health and suicide:

'Psychological problems in Pakistan are widespread. According to one estimate, around 50 million people in Pakistan suffer from mental disorders. A range of psychiatric disorders have been reported, such as depression, substance and alcohol misuse, schizophrenia, bipolar disorder, and post-traumatic stress disorder. According to one estimate, 36 percent of Pakistanis suffer from anxiety and depression, which is often caused by strained family and friend relations, the feeling of not fitting in the society, the unstable economic and political conditions of the country giving rise to unemployment and poverty.' 103

- 4.12.4 Asia Times, an international news outlet that reports on Asia, noted in February 2020, 'It is worth noting that 18 years after the enactment of the Mental Health Ordinance 2001, only three Pakistani provinces have mental-health rules in place...'104
- 4.12.5 The 2020 report on mental healthcare in Pakistan noted that mental health problems were taboo and people were reluctant to reveal a mental illness<sup>105</sup>. The report also stated:

'In Pakistani culture, it is commonplace to approach spiritual or traditional healers in cases of physical or mental illnesses. Faith healing is the traditional way of treatment for mental ailments in this culture, as people usually perceive mental illness to be the result of supernatural influences. Use of faith healers is irrespective of socio-economic factors as it usually depends on the person's belief toward spiritual healing. Faith healers are a

<sup>99</sup> WHO, 'Mental Health Atlas 2017', 2017

<sup>100</sup> WHO, 'Mental Health Atlas 2017', 2017

<sup>&</sup>lt;sup>101</sup> WHO, 'Mental Health Atlas 2017', 2017

<sup>&</sup>lt;sup>102</sup> Javed, A., et al, 'Mental healthcare in Pakistan', (pp7-8), 2020

<sup>&</sup>lt;sup>103</sup> The News, <u>Dispelling myths about mental health</u>', 16 February 2020

<sup>&</sup>lt;sup>104</sup> Asia Times, Challenges to mental health law in Pakistan, 24 February 2020

<sup>&</sup>lt;sup>105</sup> Javed, A., et al, 'Mental healthcare in Pakistan', (p7), 2020

- major source of care for people with mental health problems in Pakistan, particularly for women and those with little education.'106
- 4.12.6 Similarly, The News International noted in February 2020 '[S]eeking help for psychological disorders is problematic in Pakistan. Mental illness is often associated with supernatural forces such as witchcraft, possession, and black magic. Families often hide mental illness to prevent the patient from adverse stereotyping.'107
- 4.12.7 MedCOI noted in November 2018 and May 2019 that treatment for post-traumatic stress disorder (PTSD) was available at the Combined Military Hospital, Lahore (public facility), the Shaikh Zaid Hospital, Lahore, (private facility), Curelink Healthcare, Rawalpindi (private facility) and Karachi Psychiatric Hospital, Karachi (private facility), including:
  - Inpatient, outpatient and follow-up treatment by a psychiatrist
  - Inpatient, outpatient and follow-up treatment by a psychologist
  - Psychiatric treatment by means of psychotherapy: other than cognitive behavioural therapy
  - Psychiatric treatment of PTSD by means of cognitive behavioural therapy
  - Psychiatric treatment of PTSD by means of EMDR
  - Psychiatric treatment of PTSD by means of narrative exposure therapy<sup>108</sup> 109.
- 4.12.8 MedCOI noted in June 2019 that psychiatric treatment and treatment for drug addiction was available at the private facility Dost Foundation Hayatabad, Peshawar and the public facility Free Meth Drug Addict Centre Peshawar City:
  - Psychiatric treatment of drug addiction in a specialized clinic (rehab.)
  - Psychiatric treatment of drug addiction; inpatient/clinical care with methadone
  - Psychiatric treatment of drug addiction; outpatient care
  - Psychiatric treatment of drug addiction; outpatient care with methadone
  - Inpatient treatment by a psychiatrist
  - Outpatient treatment and follow up by a psychiatrist
  - Inpatient treatment by a psychologist
  - Outpatient treatment and follow up by a psychologist<sup>110</sup>.

See also Drug addiction.

<sup>&</sup>lt;sup>106</sup> Javed, A., et al, 'Mental healthcare in Pakistan', (p7), 2020

<sup>&</sup>lt;sup>107</sup> The News, <u>Dispelling myths about mental health</u>, 16 February 2020

<sup>&</sup>lt;sup>108</sup> MedCOI, 27 November 2018

<sup>&</sup>lt;sup>109</sup> MedCOI, 28 May 2019

<sup>&</sup>lt;sup>110</sup> MedCOI, 29 June 2019

- 4.12.9 According to MedCOI, in a response dated 21 March 2020, inpatient and outpatient treatment by a psychiatrist and psychologist was available at the Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad (private facilities)<sup>111</sup>. Both facilities also provided long-term psychiatric outpatient care and clinical treatment<sup>112</sup>.
- 4.12.10 According to the WHO Mental Health Atlas 2017, persons pay at least 20% towards the cost of mental health services / psychotropic medicines<sup>113</sup>.
- 4.12.11 On the cost of inpatient psychiatric treatment, a MedCOI response dated 21 June 2018 noted:

'At the Karachi Psychiatric Hospital, a fee is charged according to the patient's ability to pay. For impoverished patients, a nominal fee or free outpatient consultations are offered. A consultation in the hospital by a senior psychiatrist, according to the online price list for 2018, is PKR 1,580 for the first visit, and PKR 1,430 for subsequent visits. For a junior psychiatrist, the costs are PKR 1,080 for the first visit and PKR 690 for subsequent visits.

'Inpatient daily fees ranges from PKR 2420 to PKR 3800 in a ward, to PKR 5,210 for a semi-private room. The hospital also offers private rooms from PKR 6,970 per day. The inpatient fee includes room, bed, food, psychiatric medications, doctor's fee and machine treatments.' 114

4.12.12 The same response noted:

'[T]he Aga Khan Hospital provides treatment for schizophrenia and accepts mustahiq [deserving] patients. Other healthcare facilities also treat underprivileged or mustahiq patients for free or at subsidised rates. Examples of such facilities are the Psychiatric Care and Rehabilitation Center in Karachi with 100 inpatient beds, funded through donations and Zakat and run by the non-profit organisation Karwan-e-Hayat Institute for Mental Health Care, and the Free Deport Line Clinic, in the regime of the Pakistan Association for Mental Health (PAMH) and funded through donations.'115

See Affordability and health insurance for further information on Zakat.

**Back to Contents** 

# 4.13 Musculoskeletal conditions

4.13.1 A MedCOI response dated August 2019 noted that inpatient, outpatient and follow-up treatment by a rheumatologist and physical therapist, as well as laboratory research related to rheumatologic diseases (like RA, ANA, anti-CCP) was available at the Combined Military Hospital (CMH), Lahore (Public Facility) and Shaikh Zaid Hospital Lahore, (Private Facility).<sup>116</sup>

<sup>&</sup>lt;sup>111</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>112</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>113</sup> WHO, 'Mental Health Atlas 2017', 2017

<sup>&</sup>lt;sup>114</sup> MedCOI, 21 June 2018

<sup>&</sup>lt;sup>115</sup> MedCOI, 21 June 2018

<sup>&</sup>lt;sup>116</sup> MedCOI, 28 August 2019

- 4.13.2 Inpatient, outpatient and follow-up treatment by a physical therapist and a paediatric physical therapist was available at Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad (private facilities)<sup>117</sup>.
- 4.13.3 MedCOI noted in a response dated 4 February 2020 that inpatient, outpatient and follow-up treatment were available by an orthopaedist / orthopaedic surgeon and a rheumatologist at Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad (private facilities)<sup>118</sup>.
- 4.13.4 On 28 February 2020, the following costs for an orthopaedist / orthopaedic surgeon were cited by MedCOI: PKR 1,000 (public outpatient treatment); PKR1,000 (public inpatient treatment); PKR 2,980 (private outpatient treatment); and PKR 2,500 (private inpatient treatment)<sup>119</sup>. The same costs were cited for treatment by a rheumatologist<sup>120</sup>.

**Back to Contents** 

# 4.14 Neurological conditions – epilepsy

- 4.14.1 Citing neurologists speaking at a press conference in July 2015, on the eve of 'World Brain Day', The News International reported that '[O]nly 27 percent of the total epilepsy patients in the country get treated for the disease while a vast majority do not even consider it and head to quacks and faith healers.' Recognising epilepsy as a taboo topic, President of the Epilepsy Association of Pakistan said "Epilepsy is completely curable and its treatment is very affordable in most of the cases,", adding "Treatment for epilepsy is available at the National Epilepsy Centre at Jinnah hospital and also at Civil hospital [both in Karachi], along with many private hospitals,".'122
- 4.14.2 Referring to an adult with epilepsy and accessibility to medication and treatment, MedCOI noted in a response dated 23 February 2017:
  - '[A source stated] Valproat Chrono is not available in Pakistan. The alternative medication is Dilvaproex Sodium. In private clinics specialized in epilepsy, its costs ranges between PKR 15,000 to 20,000. In public facilities, the medicines are provided for free but it depends on the availability of the medicine.
  - '[Another source stated] that the medicine [Valproat Chrono] is available in private hospitals and thus payed out-of-pocket. However, public hospitals do not cover medicines for epilepsy.'123
- 4.14.3 MedCOI further noted 'Inpatient and outpatient consultations with a neurologist are available in Pakistan. In private hospitals, a consultation costs between PKR 1,500 and 2,500. In public hospitals, it is free of charge.' However, a more recent MedCOI response, dated 31 January 2020, noted the cost of inpatient and outpatient treatment by a neurologist in

<sup>&</sup>lt;sup>117</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>118</sup> MedCOI, 4 February 2020

<sup>&</sup>lt;sup>119</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>120</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>121</sup> The News, 'Epilepsy is curable and treatment is affordable in Pakistan: neurologists', 23 July 2015

<sup>&</sup>lt;sup>122</sup> The News, 'Epilepsy is curable and treatment is affordable in Pakistan: neurologists', 23 July 2015

<sup>&</sup>lt;sup>123</sup> MedCOI, 23 February 2017

<sup>124</sup> MedCOI, 23 February 2017

a public hospital cost PKR 1,000, adding the patient must pay out-of-pocket 125.

4.14.4 Referring to availability of treatment for a child with epilepsy, MedCOI noted in a response dated 6 August 2020, that inpatient and outpatient treatment by a paediatric neurologist was available at Aga Khan University Hospital and Liaquat National Hospital, both private facilities in Karachi<sup>126</sup>. Both facilities also offered neurosurgical treatment of epilepsy and diagnostic imaging by means of EEG (Electro Encephalo Gram)<sup>127</sup>.

**Back to Contents** 

# 4.15 Ophthalmology

4.15.1 MedCOI noted in a response dated 21 May 2020 that inpatient, outpatient and follow-up treatment, intravitreal injections and ophthalmological sugery: laser treatment, were available at the Aga Khan University Hospital, Karachi and Shifa International Hospital, Islamabad<sup>128</sup>.

**Back to Contents** 

### 4.16 Paediatrics

4.16.1 The Pakistan Pediatric Association (PPA) noted it was '... committed to the improvement of the health and well-being of children of Pakistan and to the academic and social advancement of pediatricians. As an association, our mission is to achieve optimum health, growth, and development of all the children of Pakistan irrespective of their diversified backgrounds, and promote their protection from child abuse and neglect.'129

## 4.16.2 UNICEF Pakistan noted:

'Millions of young lives could be saved every year if mothers and babies had access to affordable, quality health care, good nutrition, and clean water. In Pakistan, however, these necessities are out of reach for mothers and babies who need them most.

'These deaths result from poor access to immunisation and low quality maternal and newborn care services. 75% of newborn deaths are caused by three preventable and treatable conditions – complications due to premature birth, complications during labour and delivery, and infections such as sepsis, meningitis, and pneumonia.

'There is limited access to life-saving interventions which is further complicated by huge disparities between provinces, income levels, rural/urban locations and level of education, particularly of mothers. Newborn girls and boys are dying of conditions that could be managed within households and other conditions that require professional care in health facilities. Newborn survival is further complicated by other poorly performing

<sup>&</sup>lt;sup>125</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>126</sup> MedCOI, 6 August 2020

<sup>&</sup>lt;sup>127</sup> MedCOI, 6 August 2020

<sup>&</sup>lt;sup>128</sup> MedCOI, 21 May 2020

<sup>129</sup> PPA, 'Mission Statement', nd

- cross-sectoral family care practices and interventions, including adequate breastfeeding, hygiene and sanitation.'130
- 4.16.3 In February 2020, MedCOI responses noted that the Aga Khan University Hospital, Karachi and Shifa International Hospital, Islamabad, both private facilities, offered:
  - Inpatient and outpatient treatment and follow up by a paediatrician<sup>131</sup>
  - Outpatient treatment and follow up by a pediatric physical therapist 132
- 4.16.4 MedCOI quoted outpatient treatment costs by a paediatrician, in a response dated 29 January 2020: PKR 1,000 (Naval Hospital Karachi public); PKR 3,600 (Aga Khan Hospital, Karachi private)<sup>133</sup>.
- 4.16.5 Care for children with mental and physical disabilities was noted to be available at Sir Cowasgi Jahangir Psychiatry Institute, Hyderabad (Public Facility)<sup>134</sup>. Special schooling was provided by National Institute of Special Education (NISE), Islamabad (Public Facility) and Score Neurodevelopment Center, Lahore (Private Facility)<sup>135</sup>. Special schooling for a child with special educational needs was also reported to be available at Bahria Special Children School and Zainab House For Special Children, both private facilities in Karachi<sup>136</sup>.

**Back to Contents** 

#### 4.17 Palliative care

4.17.1 In June 2018, referring to a paper 'Oncology and Palliative Medicine: Providing Comprehensive Care for Patients with Cancer', Syed Maaz Tariq, Mohammad Hasan and Syed Ali Haider of the Department of Medicine, Jinnah Sindh Medical University, Karachi, addressed the editor of the Ochsner Journal, a peer-reviewed quarterly medical journal, and gave their perspective on palliative care in Pakistan:

'In Pakistan, palliative medicine is not recognized as a discipline, so centers have not been established and physicians are not trained in palliative care. According to the survey published by the International Observatory on End of Life Care, Pakistan has the "least favorable ratio" for palliative care facilities, with only one service existing for a population of 157,935,000. The medical curriculum taught in Pakistan has neither a dedicated course for palliative medicine nor a clinical rotation related to it. Palliative medicine fellowship programs in Pakistan are lacking as well.' 137

4.17.2 A report by The Nation, dated 12 October 2019, stated that according to Dr Haroon Hafeez, Associate Medical Director, Consultant Hospitalist and Palliative Medicine Physician at the Shaukat Khanum Memorial Cancer

<sup>&</sup>lt;sup>130</sup> UNICEF Pakistan, 'Health', nd

<sup>&</sup>lt;sup>131</sup> MedCOI, 19 February 2020

<sup>&</sup>lt;sup>132</sup> MedCOI, 19 February 2020

<sup>&</sup>lt;sup>133</sup> MedCOI, 29 January 2020

<sup>&</sup>lt;sup>134</sup> MedCOI, 19 February 2020

<sup>&</sup>lt;sup>135</sup> MedCOI, 19 February 2020

<sup>&</sup>lt;sup>136</sup> MedCOI, 6 August 2020

<sup>&</sup>lt;sup>137</sup> Ochsner Journal, 'Palliative Medicine in Pakistan: A Developing Country's Perspective', June 2018

Hospital and Research Centre (SKMCH&RC), "Only Shaukat Khanum Hospitals in Lahore and Peshawar are with a fully-trained JCI [Joint Commission International] accredited specialist palliative medicine full-fledged team and access to some basic opioids."

4.17.3 Shifa International Hospital noted:

'The Department of Palliative Care comprises a multidisciplinary team of doctors, nurses, therapists, physiotherapists, and consultants, devoted to bettering the quality of life of the patients and their families. With the employment of modern medicinal techniques and the latest facilities and equipment, the department is capable of offering a wide range of palliative care programs for a number of illnesses. The department's main goal is to enhance the comfort of the patient as much as possible by offering pain management, therapy, and consultancies by specialists.' 139

4.17.4 In February 2019, The News International reported on the lack of palliative care for cancer patients, adding, 'According to health experts, palliative care is particularly required in places like Pakistan that has high proportion of patients with advanced stages [of cancer] with little chance of cure.' (see also Cancer).

**Back to Contents** 

# 4.18 Pulmonology (lung diseases)

4.18.1 A MedCOI response dated 31 January 2020 noted that inpatient, outpatient and follow-up treatment was available by a pulmonologist at Aga Khan University Hospital, Karachi and Shifa International Hospital, Islamabad<sup>141</sup>. Paediatric pulmonology cases were treated by paediatricians rather than specialist paediatric pulmonologists<sup>142</sup>. Available medical devices included a cough assist machine (coughlator) and assisted cough techniques; air stacking therapy and training<sup>143</sup>. The same response added that the transplantation of lung(s), including all pre-and aftercare, was not available in Pakistan<sup>144</sup>.

### 4.19 Renal conditions

4.19.1 Gulf News, an international news outlet reported in March 2019:

'Health experts on Wednesday claimed that Pakistan ranks eight in the list of countries with a high rate of kidney diseases, with 17 million people suffering from such diseases.

'According to them, chronic kidney disease (CKD) is rapidly growing in Pakistan due to late diagnosis, kidney stone disease and increasing number of patients suffering from diabetes and high blood pressure.

<sup>&</sup>lt;sup>138</sup> The Nation, 'Hospice & Palliative Care Day today', 12 October 2019

<sup>139</sup> Shifa International Hospital, 'Palliative care', nd

<sup>&</sup>lt;sup>140</sup> The News, 'Pakistan lacks cancer diagnostic, treatment and palliative care...', 3 February 2019

<sup>&</sup>lt;sup>141</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>142</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>143</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>144</sup> MedCOI, 31 January 2020

'Nephrologist and head of the Kidney Transplant Unit at Pakistan Institute of Medical Sciences (PIMS), Dr Khawar Sultan said consuming junk and low quality food, self-medication or excessive use of medicine, low water intake, obesity, diabetes, hypertension and renal stones are few common causes of kidney diseases.' 145

- 4.19.2 MedCOI noted in a response dated 28 November 2019 that inpatient and outpatient treatment by a urologist was available at the Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad, both private facilities 146.
- 4.19.3 A MedCOI response dated 6 January 2020 noted that inpatient and outpatient treatment by a nephrologist was available at the Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad, both private facilities<sup>147</sup>. MedCOI noted costs for treatment by a nephrologist, as at 31 January 2020, as PKR 1,000 per treatment (for public outpatient or inpatient) and PKR 2,500 per treatment (for private outpatient or inpatient)<sup>148</sup>. In all cases, patient must pay out-of-pocket<sup>149</sup>.
- 4.19.4 A MedCOI response, dated 25 July 2019, provided information about the accessibility and cost of treatment for haemodialysis:

'In a 2016 news article a medical doctor has argued that dialysis for four hours, three times a week is considered the standard. Depending on public or private sector, each session dialysis would cost between PKR 3,000 and 5,000. The article further states that there is a demand and supply gap regarding dialysis treatment in public hospitals. An endocrinologist at the Pakistan Institute of Medical Sciences in Islamabad has said that 'Pakistan needs half a million machines to meet the need but sadly, there are only 19,000 machines in the country.' The machines become overused and abused which affects their efficiency. In addition there are less than 200 trained and qualified nephrologists for a population of more than 180 million in the country.

'According to a 2016 research report, only 10 % of patients in Pakistan needing dialysis receive this treatment due to the enormous cost of the therapy. Patients commonly reduce the dialysis frequency because of the lack of financial resources.

'Pakistan Kidney Institute in Islamabad offers partially subsidised haemodialysis treatment to poor patients.

'Al-Mustafa Welfare Trust is a charitable and non-profit organisation in Pakistan 'working for the social development and providing relief to the low income groups'. At their main hospital in Gulshan-e-Iqbal (Karachi) they provide free dialysis treatment to patients who cannot afford the medical costs.

<sup>&</sup>lt;sup>145</sup> Gulf News, <u>'17 million Pakistanis suffering from kidney diseases'</u>, 13 March 2019

<sup>&</sup>lt;sup>146</sup> MedCOI, 28 November 2019

<sup>&</sup>lt;sup>147</sup> MedCOI, 6 January 2020

<sup>&</sup>lt;sup>148</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>149</sup> MedCOI, 31 January 2020

'The Razia Begum Dialysis Centre in Lahore gives free dialysis services to those suffering from chronic kidney disease and do not have enough financial means to pay for the treatment.

'The Kidney Centre (TKC) in Karachi offers haemodialysis either entirely free or largely subsidised to non-affording or self-paying patients.

'Sindh Institute of Urology and Transplantation in Karachi offers haemodialysis services free of cost to patient with low finances.

'According to Shifa International hospital, the hospital offers haemodialysis services free of cost to patients with low finances. Other patients have to pay PKR 3,500.'150

- 4.19.5 According to a MedCOI response dated 31 January 2020, chronic haemodialysis (per session) cost PKR2,500 PKR6,500 and patient must pay out-of-pocket<sup>151</sup>.
- 4.19.6 MedCOI noted in January 2020 that kidney transplantation, including all preand post-care, was available at Shareef Institute of Urology & Renal Transplant (SIURT), Lahore (private) and Sindh Institute of Urology & Transplant (SIUT), Karachi (public)<sup>152</sup>. Transplantation of kidney including all pre- and aftercare cost PKR1,500,000 PKR3,000,000 and patient must pay out-of-pocket<sup>153</sup>.
- 4.19.7 Laboratory research of renal/ kidney function testing were available at the same facilities<sup>154</sup>. Testing and out-of-pocket costs creatinine (PKR300 public, PKR600 private); ureum (PKR250 public, PKR600 private); proteinuria (PKR400 public, PKR490 private); sodium, potassium levels (PKR250 public, PKR500 private); PTH (parathyroid hormone levels PKR1,050 public, PKR2,810 private); calcium (PKR300 public, PKR800 private); phosphate (PKR250 public, PKR private)<sup>155</sup> <sup>156</sup>. All prices for treatments in public facilities were obtained from the Combined Military Hospital (CMH), Rawalpindi<sup>157</sup>.
- 4.19.8 In February 2020 it was also noted by MedCOI that laboratory research acidbase balance in blood and urine; e.g. serum and urine pH, electrolyte levels, was available at the Aga Khan University Hospital, Karachi, and Shifa International Hospital, Islamabad<sup>158</sup>.

**Back to Contents** 

# 4.20 Speech therapy

4.20.1 Referring to a child with special educational needs, a MedCOI response, dated 6 August 2020, noted that outpatient treatment and follow up by a

<sup>&</sup>lt;sup>150</sup> MedCOI, 25 July 2019

<sup>&</sup>lt;sup>151</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>152</sup> MedCOI, 6 January 2020

<sup>&</sup>lt;sup>153</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>154</sup> MedCOI, 28 November 2019

<sup>&</sup>lt;sup>155</sup> MedCOI, 6 January 2020

<sup>&</sup>lt;sup>156</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>157</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>158</sup> MedCOI, 19 February 2020

- speech therapist was available at Aga Khan University Hospital and Liaquat National Hospital, both private facilities in Karachi<sup>159</sup>.
- 4.20.2 Gulf News reported in July 2017 that speech therapy cost between PKR 3,000 to PKR 5,000 per session<sup>160</sup>.

**Back to Contents** 

### 4.21 Tuberculosis (TB)

4.21.1 The Pakistan Economic Survey for 2019-2020 noted:

'Pakistan has the fifth-highest burden of TB worldwide. The government declared the occurrence of TB a national emergency and implemented the Directly Observed Treatment Strategy (DOTS) that was followed by the Stop TB Strategy. National TB Control Programme (NTP) has achieved over 85 percent DOTS coverage in the public sector, and in the last five years, the programme has provided care to more than half a million TB Patients in Pakistan.'161

- 4.21.2 Referring to the steps taken to control TB, the Pakistan Economic Survey for 2018-2019 noted, '[A] Country wide network of around 1,400 TB care facilities are providing free TB diagnostic and treatment services. More than 3,500 GPs, 125 NGO networks, 35 private hospitals and 45 parastatal hospitals & 2000 pharmacies have been engaged & trained.'162
- 4.21.3 A WHO report on TB services, dated 2018, noted Pakistan's TB incidence rate as 267 per 100,000 population and 525,000 new TB cases emerging each year<sup>163</sup>.
- 4.21.4 A MedCOI response on accessibility to TB treatment, dated 28 February 2020, noted 'There is a national tuberculosis control programme, with a vision of universal access to TB care and which works to reduce the prevalence of TB in the general population. There are also provincial TB control programmes in Pakistan. Through the TB care facilities, free of cost diagnosis and treatment is offered.'164
- 4.21.5 In February 2020 it was noted by MedCOI that inpatient and outpatient treatment and follow-up by an tuberculosis specialist, internal specialist and infectiologist was available at the Aga Khan University Hospital, Karachi and Shifa International Hospital, Islamabad, both private facilities<sup>165</sup>. Inpatient and outpatient treatment and follow-up by a pulmonologist was available at the same facilities, as well as resistance testing for tuberculosis drugs sputum smear microscopy<sup>166</sup> <sup>167</sup>.

<sup>&</sup>lt;sup>159</sup> MedCOI, 6 August 2020

<sup>&</sup>lt;sup>160</sup> Gulf News, 'Pakistani girls give voice to the voiceless with speech therapy App', 14 July 2017

<sup>&</sup>lt;sup>161</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p220), 2020

<sup>&</sup>lt;sup>162</sup> Government of Pakistan, 'Pakistan Economic Survey 2018-2019', (p178), 2019

<sup>&</sup>lt;sup>163</sup> WHO, 'Baseline assessment of community based TB services...', (p54), 2018

<sup>&</sup>lt;sup>164</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>165</sup> MedCOI, 4 February 2020

<sup>&</sup>lt;sup>166</sup> MedCOI, 12 June 2019

<sup>&</sup>lt;sup>167</sup> MedCOI, 4 February 2020

4.21.6 A MedCOI response dated 28 February 2020 noted in regard to accessibility of treatment for TB of the bone, '[T]here are no programmes or non-governmental organisations that specifically support patients with bone tuberculosis (TB)<sup>168</sup>. In relation to the same condition, the following costs for a TB specialist were cited by MedCOI: PKR 1,000 (public outpatient treatment); PKR1,000 (public inpatient treatment); PKR 2,980 (private outpatient treatment); and PKR 2,500 (private inpatient treatment). MedCOI were informed that 'none of the treatments are reimbursed or covered by public health insurance.' 169

**Back to Contents** 

### 4.22 Women's health

4.22.1 The Pakistan Economic Survey for 2019-2020 noted:

'Family Planning and Primary Health Care (FP&PHC) programme with intensification through Ehsaas Programme is striving to control population growth. Pakistan has a high total fertility rate (TFR) of 3.8 percent, and the current modern Contraceptive Prevalence Rate (mCPR) is 26 percent. Ministry of NHSRC [National Health Services Regulations and Coordination] has revealed that there were still 3.1 million unintended pregnancies in the last year-and-half amid not using modern contraceptive techniques. The Lady Health Workers (LHWs) have been engaged through FP&PHC Programme to support the population control efforts over the last two decades.

'The FP&PHC programme so far has recruited more than 100,000 LHWs with services encompassing the health conditions of women and children through improved sanitation, birth spacing, iron supplementation, more extensive vaccination coverage, and through Ante-Natal Coverage (ANC) and Post-Natal Coverage (PNC) of the pregnant women.' 170

4.22.2 Regarding knowledge of contraceptive methods, the Pakistan Bureau of Statistics report in 2019 noted:

'Female sterilization (88 percent), injectable and the pill (93 percent each), and IUDs [intrauterine device] (81 percent) are the most commonly known modern methods among women, followed by male condoms (84 percent). More than half of the women are aware of LAM [Lactational amenorrhoea method] (58 percent) and male sterilization (36 percent). Implants and emergency contraception are known by a much smaller percentage of women (52 percent). Thirteen percent of women have heard about SDM [standard days method].'<sup>171</sup>

4.22.3 The Pakistan Economic Survey for 2019-2020 referred to the Maternal and Child Health (MCH) Programme, noting:

'The MCH programme is implemented by the federal and provincial departments of health for translating the National Health Vision (2016-2025) with the aim to provide better access and quality to mother and child health

<sup>&</sup>lt;sup>168</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>169</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>170</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p219), 2020

<sup>&</sup>lt;sup>171</sup> Pakistan Bureau of Statistics, 'Compendium on gender statistics of Pakistan' (p34), 2019

and family planning services with the provision of comprehensive Emergency Obstetric and Neonatal Care (EmONC) services in 275 hospitals/health facilities, provision of basic EmONC services in 550 health facilities and family planning services in all health outlets.

'Pakistan had shown improvement in the Infant Mortality Rate (IMR) to 62 per one thousand from 66 per one thousand in 2015, but Maternal Mortality Rate (MMR) of 170/100,000 is still very high as compared to other regional countries. The grounds for a legal basis for a safe abortion shall be broadened, and access to safe abortion services improved to reduce the number of clandestine procedures and its negative consequences.'172

For more information on access to health care for women and reproductive rights, see the Country Policy and Information Note on Pakistan: Women fearing gender-based violence.

**Back to Contents** 

Section 5 updated: 3 September 2020

#### **5**. **Pharmaceuticals**

5.1 Accessibility to pharmaceutical drugs

5.1.1 MedCOI noted in a response dated 13 August 2019:

> 'Medicines in Pakistan are regulated by the Drug Regulatory Authority of Pakistan (DRAP): "sales, storage, and distribution of drugs are regulated at provincial level while the manufacturing (licensing), registration, pricing, import, export, and monitoring of controlled drugs comes under the domain of federal government."

'Despite actions taken by the Government of Pakistan to freeze the maximum retail prices of medicines, pharmaceutical companies have been found to not always respect these fixed prices. According to a 2016 news article, this is caused by the fact that the DRAP are being permissive to the private sector raising prices on their own accord. Another news article from 2019 mentions that the DRAP themselves had recently approved a raise of 9 % in prices of life saving medicines and a 15 % raise of the prices of all other medicines, despite the old prices already being unaffordable for the population living under the poverty line. However, the same article mentions that the Province of Khyber Pakhtunkhwa's Peshawar High Court has delayed the Government's price raise until further notice.

[...]

'Medications on Pakistan's Essential Medicine List (EML) should be provided by in public health facilities free of charge. However, a research article from 2017 mentions the fact there is only enough supply of free medications available to cater to one-fifth of the population.

'According to 2019 research article, "the ministry of health, government of Pakistan had been providing free medicines in the public sector hospitals, nevertheless, the poor availability of medicines in public health facilities

<sup>&</sup>lt;sup>172</sup> Government of Pakistan, 'Pakistan Economic Survey 2019-20', (p221), 2020

might compel the patients to get their medicines from private sector medicine retail outlets where they are supposed to pay from their own pockets".'173

- 5.2 Availability of pharmaceutical drugs
- 5.2.1 The following non-exhaustive A-Z list of drugs, cited by MedCOI, were noted as available in Pakistan, either in pharmacy or online (per dosage form / number per box / cost in Pakistan Rupees (PKR) included, where given; out-of-pocket payment may be required):
- 5.3 A-D
- 5.3.1 Acetylsalicylic acid<sup>174</sup>; Alendronate sodium (alendronic acid)<sup>175</sup>; Allopurinol (100mg tablet, 20, PKR20)<sup>176</sup>; Amitriptyline (25mg tablet, 100, PKR127.49)<sup>177</sup>; Amlodipine Norvasc® (10mg tablet, 20, PKR466.5)<sup>178</sup>; Aripiprazole<sup>179</sup>; Atorvastatin<sup>180</sup>; Azithromycin<sup>181</sup>; Betamethasone<sup>182</sup>; Bevacizumab<sup>183</sup>; Bisoprolol<sup>184</sup>; Budesonide<sup>185</sup>; Bumetanide<sup>186</sup>; Calcium carbonate<sup>187</sup>; Candesartan (10mg tablet, 14, PKR343)<sup>188</sup>; Captopril<sup>189</sup>; Carbasalate calcium<sup>190</sup>; Carbomer eye drops<sup>191</sup>; Carvedilol<sup>192</sup>; Cetirizine<sup>193</sup>; Chlortalidone<sup>194</sup>; Ciprofloxacin<sup>195</sup>; Citalopram<sup>196</sup>; Clarithromycin<sup>197</sup>; Clemastine<sup>198</sup>; Clozapine<sup>199</sup>; Colecalciferol (vitamin D supplements)<sup>200</sup>; Dapagliflozin (10mg tablet, 14, PKR358-400)<sup>201</sup>; Diazepam<sup>202</sup>; Diclofenac

<sup>&</sup>lt;sup>173</sup> MedCOI, 13 August 2019

<sup>&</sup>lt;sup>174</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>175</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>176</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>177</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>178</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>179</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>180</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>181</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>182</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>183</sup> MedCOI, 21 May 2020

<sup>&</sup>lt;sup>184</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>185</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>186</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>187</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>188</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>189</sup> MedCOI, 4 February 2020

<sup>&</sup>lt;sup>190</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>191</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>192</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>193</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>194</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>195</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>196</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>197</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>198</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>199</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>200</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>201</sup> MedCOI, 16 April 2020

<sup>&</sup>lt;sup>202</sup> MedCOI, 16 May 2019

Voltral (50mg tablet, 20, PKR115.92)<sup>203</sup>; Doxazosin (4mg tablet, 10, PKR773.69)<sup>204</sup>;

**Back to Contents** 

#### 5.4 E-H

5.4.1 Empagliflozin (10mg tablet, 14, PKR252-350)<sup>205</sup>; Enalapril<sup>206</sup>; Erythromycin<sup>207</sup>; Esomeprazole (20mg 40mg capsule, 14 14, PKR119 PKR198)<sup>208</sup>; Escitalopram<sup>209</sup>; Etanercept<sup>210</sup>; Fluoxetine<sup>211</sup>; Fluticasone<sup>212</sup>; Fluvoxamine<sup>213</sup>; Formoterol<sup>214</sup>; Furosemide<sup>215</sup>; Gabapentin (100mg 300mg 400mg capsule, 30, PKR276 PKR562 PKR723)<sup>216</sup>; Gliclazide<sup>217</sup>; Golimumab<sup>218</sup>; Haloperidol<sup>219</sup>; Hydrochlorothiazide<sup>220</sup>; Hypromellose eyedrops<sup>221</sup>.

**Back to Contents** 

### 5.5 I-L

Ibuprofen (200mg 400mg 600mg tablet, 500 250 36, PKR445 PKR599 PKR109)<sup>222</sup>; Insulin, premixed: aspart (rapid acting) and aspart protamine (intermediate acting) like Novomix® (diabetes: insulin injections; mix of intermediate and rapid acting)<sup>223</sup>; Insulin: long acting 24hr; insulin glargine like Lantus® (diabetes: insulin injections; long acting 24 hr – 100 units/ml-3ml cartridge, 5, PKR4,400)<sup>224</sup> <sup>225</sup>; Insulin: rapid acting [2-5hr]; insulin aspart like Novorapid® (Diabetes: insulin injections; rapid acting [2-5 hr])<sup>226</sup>; Indometacin<sup>227</sup>; Infliximab<sup>228</sup>; Ipratropium<sup>229</sup>; Isoniazid (100mg tablet, 1,000,

<sup>&</sup>lt;sup>203</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>204</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>205</sup> MedCOI, 16 April 2020

<sup>&</sup>lt;sup>206</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>207</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>208</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>209</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>210</sup> MedCOI, 28 August 2019

<sup>&</sup>lt;sup>211</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>212</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>213</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>214</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>215</sup> MedCOI. 4 February 2020

<sup>&</sup>lt;sup>216</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>217</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>218</sup> MedCOI, 28 August 2019

<sup>&</sup>lt;sup>219</sup> MedCOI, 29 June 2019

<sup>&</sup>lt;sup>220</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>221</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>222</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>223</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>224</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>225</sup> MedCOI, 25 July 2019

<sup>&</sup>lt;sup>226</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>227</sup> MedCOI, 28 August 2019

<sup>&</sup>lt;sup>228</sup> MedCOI, 28 August 2019

<sup>&</sup>lt;sup>229</sup> MedCOI, 16 May 2019

PKR65)<sup>230</sup>; Isosorbide dinitrate<sup>231</sup>; Isosorbide mononitrate<sup>232</sup>; Ketotifen fumarate eyedrops<sup>233</sup>; Lactulose<sup>234</sup>; Latanoprost<sup>235</sup>; Levofloxacin<sup>236</sup>; Levocetirizine<sup>237</sup>; Lisinopril<sup>238</sup>.

**Back to Contents** 

### 5.6 M-P

Macrogol<sup>239</sup>; Magnesium hydroxide<sup>240</sup>; Metformin<sup>241</sup>; Metoprolol<sup>242</sup>; Morphine<sup>243</sup>; Moxifloxacin hydrochloride (400mg tablet, 5, PKR498)<sup>244</sup>; Naproxen (250mg 500mg tablet, 20 20, PKR127 PKR228)<sup>245</sup>; Nebivolol (10mg tablet, 14, PKR266)<sup>246</sup>; Nifedipine<sup>247</sup>; Olanzapine<sup>248</sup>; Omeprazole (20mg capsule, 14, PKR241)<sup>249</sup>; Oxazepam<sup>250</sup>; Oxycodone<sup>251</sup>; Pantoprazole (40mg tablet, 14, PKR863)<sup>252</sup>; Paracetamol<sup>253</sup>; Paroxetine<sup>254</sup>; Povidone eye drops<sup>255</sup>; Pravastatin<sup>256</sup>; Prednisone<sup>257</sup>; Pregabalin (150mg 300mg 75mg capsule, 14 14 14, PKR1,500 PKR2,500 PKR1,000)<sup>258</sup>.

<sup>&</sup>lt;sup>230</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>231</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>232</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>233</sup> MedCOI, 21 May 2020

<sup>&</sup>lt;sup>234</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>235</sup> MedCOI, 26 January 2019

<sup>&</sup>lt;sup>236</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>237</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>238</sup> MedCOI, 4 February 2020

<sup>&</sup>lt;sup>239</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>240</sup> MedCOI, 29 June 2019

<sup>&</sup>lt;sup>241</sup> MedCOI, 21 May 2020

<sup>&</sup>lt;sup>242</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>243</sup> MedCOI, 26 January 2019

<sup>&</sup>lt;sup>244</sup> MedCOI. 28 February 2020

<sup>&</sup>lt;sup>245</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>246</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>247</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>248</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>249</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>250</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>251</sup> MedCOI, 26 January 2019

<sup>&</sup>lt;sup>252</sup> MedCOI, 28 February 2020

<sup>&</sup>lt;sup>253</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>254</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>255</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>256</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>257</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>258</sup> MedCOI, 28 February 2020

### 5.7 Q-T

Quetiapine<sup>259</sup>; Ramipril<sup>260</sup>; Ranibizumab<sup>261</sup>; Ranitidine<sup>262</sup>; Risedronate sodium<sup>263</sup>; Risperidone<sup>264</sup>; Salbutamol<sup>265</sup>; Salmeterol + fluticasone<sup>266</sup>; Saxagliptin hydrochloride (5mg tablet, 10, PKR502.87)<sup>267</sup>; Sertraline<sup>268</sup>; Sodium bicarbonate (= sodium hydrogen carbonate) (15ml injection, 5 vials, PKR15)<sup>269</sup>; Sodium (natrium) polystyrene sulphonate (1g, 1, PKR24)<sup>270</sup>; Temazepam<sup>271</sup>; Terbutaline<sup>272</sup>; Timolol<sup>273</sup>; Timolol + brimonidine (combination)<sup>274</sup>; Tiotropium<sup>275</sup>; Tramadol<sup>276</sup>.

**Back to Contents** 

## 5.8 U-Z

5.8.1 Venlafaxine<sup>277</sup>; Vildagliptin Galvus® (50mg tablet, 28, PKR1,472)<sup>278</sup>; Warfarin<sup>279</sup>, Zolpidem<sup>280</sup>.

**Back to Contents** 

<sup>259</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>260</sup> MedCOI, 4 February 2020

<sup>&</sup>lt;sup>261</sup> MedCOI, 21 May 2020

<sup>&</sup>lt;sup>262</sup> MedCOI, 29 June 2019

<sup>&</sup>lt;sup>263</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>264</sup> MedCOI, 21 March 2020

<sup>265</sup> M. 1001 24 J. 2020

<sup>&</sup>lt;sup>265</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>266</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>267</sup> MedCOI, 16 April 2020

<sup>&</sup>lt;sup>268</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>269</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>270</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>271</sup> MedCOI, 26 January 2019

<sup>&</sup>lt;sup>272</sup> MedCOI, 31 January 2020

<sup>&</sup>lt;sup>273</sup> MedCOI, 26 January 2019

<sup>&</sup>lt;sup>274</sup> MedCOI, 26 January 2019

<sup>&</sup>lt;sup>275</sup> MedCOI, 16 May 2019

<sup>&</sup>lt;sup>276</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>277</sup> MedCOI, 21 March 2020

<sup>&</sup>lt;sup>278</sup> MedCOI, 16 April 2020

<sup>&</sup>lt;sup>279</sup> MedCOI, 21 December 2019

<sup>&</sup>lt;sup>280</sup> MedCOI, 28 November 2018

# **Terms of Reference**

A 'Terms of Reference' (ToR) is a broad outline of what the CPIN seeks to cover. They form the basis for the <u>country information section</u>. The Home Office's Country Policy and Information Team uses some standardised ToR, depending on the subject, and these are then adapted depending on the country concerned.

For this particular CPIN, the following topics were identified prior to drafting as relevant and on which research was undertaken:

- Healthcare system
  - Overview
  - o Affordability and health insurance
  - Public sector
  - Private sector
  - Non-government organisation (NGO) provision and assistance
- Healthcare facilities
  - o Hospitals
  - o Public
  - Private
- Covid-19
- Medical conditions
- Pharmaceuticals
  - o Accessibility to pharmaceutical drugs
  - Availability of pharmaceutical drugs (A-Z)

# Bibliography

### Sources cited

Aga Khan University, 'Pakistan announces ambitious plan to eliminate hepatitis', 28 July 2019. Last accessed: 15 June 2020

Asia Times, 'Challenges to mental health law in Pakistan', 24 February 2020. Last accessed: 11 August 2020

Bertelsmann Stiftung, 'BTI Pakistan Country Report 2020', 2020. Last accessed: 15 June 2020

Bhatti, H., et al, '<u>Living Donor Liver Transplantation in Pakistan</u>', July 2017. Last accessed: 24 August 2020

BioMed Central (BMC), 'Characterization of Hepatitis C virus epidemic in Pakistan', 2019, last accessed: 28 July 2020

Diabetes Association of Pakistan, 'About DAP', nd. Last accessed 15 June 2020

The Diabetes Centre, (website). Last accessed: 24 August 2020

Directorate of Malaria Control (DOMC), 'Pakistan Malaria Annual Report 2019' (p16), 2019. Last accessed: 3 September 2020

Export.gov, '<u>Healthcare Resource Guide: Pakistan'</u>, 4 November 2019. Last accessed: 10 June 2020

Pakistan, Health Research Council, Non-Communicable Diseases Risk', 2015. Last accessed: 15 June 2020

Government of Pakistan,

'Expanded Program on Immunization', nd. Last accessed: 17 June 2020

'Pakistan Economic Survey 2018-2019', 2019. Last accessed: 16 June 2020

'Pakistan Economic Survey 2019-20', 2020. Last accessed: 20 August 2020

### Gulf News,

'17 million Pakistanis suffering from kidney diseases', 13 March 2019. Last accessed: 12 August 2020

'Pakistani girls give voice to the voiceless with speech therapy App', 14 July 2017. Last accessed: 12 August 2020

Indus Hospital, 'Indus Health Network', nd. Last accessed: 20 August 2020

International Diabetes Federation, 'Pakistan', 25 February 2020. Last accessed: 15 June 2020

Javed A, Khan MN, Nasar A, Rasheed A., 'Mental healthcare in Pakistan', Taiwanese Journal of Psychiatry, 2020. Last accessed: 24 August 2020

Journal of the Pakistan Dental Association, '<u>Dentistry in Pakistan-Standing at the Crossroads Facing Numerous Challenges with an Uncertain Future</u>', January 2018. Last accessed: 11 August 2020

Liver Foundation, Our services', nd. Last accessed: 15 June 2020

### MedCOI,

- 28 May 2020. Last accessed: 9 June 2020
- 19 February 2020. Last accessed: 19 February 2020
- 4 February 2020. Last accessed: 19 February 2020
- 31 January 2020. Last accessed: 26 February 2020
- 21 December 2019. Last accessed: 19 February 2020
- 29 June 2019. Last accessed: 19 February 2020
- 27 November 2018. Last accessed: 19 February 2020
- 15 September 2018. Last accessed: 19 February 2020
- 4 September 2018. Last accessed: 19 February 2020
- 6 September 2018. Last accessed: 20 August 2020
- 2 February 2019. Last accessed: 20 August 2020
- 21 June 2018. Last accessed: 21 August 2020
- 28 November 2019. Last accessed: 24 August 2020
- 23 February 2017. Last accessed: 24 August 2020
- 6 August 2020. Last accessed: 24 August 2020
- 6 January 2020. Last accessed: 25 August 2020
- 12 June 2019. Last accessed: 25 August 2020
- 16 April 2020. Last accessed: 26 August 2020
- 31 January 2020. Last accessed: 26 August 2020
- 13 August 2019. Last accessed: 26 August 2020
- 28 May 2019. Last accessed: 27 August 2020
- 16 May 2019. Last accessed: 27 August 2020
- 21 March 2020. Last accessed: 27 August 2020

The Nation, '<u>Hospice & Palliative Care Day today</u>', 12 October 2019. Last accessed: 25 August 2020

National AIDS Control Programme, '<u>HIV Treatment Services'</u>, nd. Last accessed: 26 August 2020

The News International,

'46 people dying of heart diseases in Pakistan every hour', 30 September 2018. Last accessed: 29 June 2020

'<u>Dispelling myths about mental health</u>', 16 February 2020. Last accessed: 10 August 2020

'<u>Epilepsy is curable and treatment is affordable in Pakistan: neurologists</u>', 23 July 2015. Last accessed: 25 August 2020

'Neither private nor public hospitals providing quality health facilities in Pakistan: Prof Bari', 26 December 2019. Last accessed: 20 August 2020

'<u>Pakistan severely lacks diagnostic, treatment and palliative care facilities</u>', 3 February 2019. Last accessed: 14 August 2020

Ochsner Journal, 'Palliative Medicine in Pakistan: A Developing Country's Perspective', June 2018. Last accessed: 25 August 2020

Pakistan Bureau of Statistics, <u>'Compendium on gender statistics of Pakistan'</u>, 2019. Last accessed: 29 June 2020

Pakistan Health Research Council (PHRC),

'Cancer awareness campaign', nd. Last accessed: 26 June 2020

'Malaria Indicators Survey In 38 High Risk Districts of Pakistan', 2014. Last accessed: 24 August 2020

'Non-Communicable Diseases Risk Factors Survey Pakistan', 2016. Last accessed: 21 August 2020

Pakistan Pediatric Association (PPA), 'Mission Statement', nd. Last accessed: 25 August 2020

Pakistan Today, 'Pakistan's healthcare system', 8 January 2020. Last accessed: 10 June 2020

Roche, 'Addressing the lack of cancer care in Pakistan', August 2018. Last accessed: 20 August 2020

Sehat Sahulat Program (SSP),

'About the program', nd. Last accessed: 15 June 2020

'Frequently Asked Questions', nd. Last accessed: 19 August 2020

Shifa International Hospital,

'Palliative Care', nd. Last accessed: 13 August 2020

UNICEF Pakistan, 'Health', nd. Last accessed: 12 August 2020

World Health Organization (WHO),

'<u>15 million people affected with hepatitis B and C in Pakistan: Government announces ambitious plan to eliminate hepatitis</u>', 28 July 2019. Last accessed: 15 June 2020

'Baseline assessment of community based TB services in 8 engage-TB priority countries', 2018. Last accessed: 15 June 2020

<u>'Global Cancer Observatory Pakistan 2018'</u>, May 2019. Last accessed: 17 June 2020

'Global Tuberculosis Report 2019', 2019. Last accessed: 15 June 2020

'HIV cases-Pakistan', 3 July 2019. Last accessed: 26 August 2020

'Malaria and other vector-borne diseases', nd. Last accessed: 15 June 2020

'Mental Health Atlas 2017', 2017. Last accessed: 24 August 2020

'Nutrition and food safety', nd. Last accessed: 15 June 2020

'Pakistan Fact Sheet', 2016. Last accessed: 29 June 2020

'Pakistan Health Service Delivery', nd. Last accessed: 9 June 2020

'Primary oral health care: a missing link in public health in Pakistan', 2016. Last accessed: 10 August 2020

World Cancer Research Fund, Mouth, pharynx & larynx cancer statistics, 2018. Last accessed: 10 August 2020

**Back to Contents** 

#### Sources consulted but not cited

Dawn,

'End of Life Care', 12 February 2016. Last accessed: 10 August 2020

'<u>Families cover up what happened to their loved one. And taboo prevents all discussion.</u>', 28 April 2020. Last accessed: 14 August 2020

'<u>The poor state of Pakistan's healthcare system</u>', 22 September 2016. Last accessed: 10 August 2020

Diabetic Research and Clinical Practice, 'Pakistan and diabetes – A country on the edge', 10 November 2018. Last accessed: 8 July 2020

International Journal of Advanced Research and Publications, <u>'Healthcare System Of Pakistan'</u>, October 2017. Last accessed: 10 August 2020

Global Cancer Research, '<u>The Global Cancer Burden'</u>, June 2019. Last accessed: 17 June 2020

Journal of the Pakistan Medical Association, 'Risk factors of cardiovascular disease and its recommendations in Pakistani context', November 2017. Last accessed: 10 August 2020

Macro Trends, 'Pakistan Healthcare Spending 2000-2020', 2020. Last accessed: 15 June 2020

The Nation, 'Children mostly affected with dental problems in Pakistan', 15 February 2018. Last accessed: 8 July 2020

The News International,

'<u>Number of cancer cases continuously on the rise'</u>, 5 February 2020. Last accessed: 10 August 2020

<u>'Diabetes Prevalence Data in Pakistan 35.3m adult population diabetic in country: survey'</u>, 26 November 2017. Last accessed: 8 July 2020

'400 people losing life to hepatitis in Pakistan daily', 30 July 2018. Last accessed: 23 July 2020

Pakistan Society of Nephrology, '<u>Diabetes and diabetic nephropathy in Pakistan'</u>, nd. Last accessed: 15 June 2020

Primary Care Diabetes, 'Pakistan National Diabetes Survey: Prevalence of glucose intolerance and associated factors in the Punjab Province of Pakistan', 11 February 2010. Last accessed 8 July 2020

The Telegraph, 'Pakistan pilots hepatitis C therapy in bid to wipe out silent epidemic', 18 March 2019. Last accessed: 12 August 2020

World Health Organization (WHO)

'Pakistan Mortality Fact Sheet', 2016. Last accessed: 10 July 2020

'Regional action plan for the implementation', 2017. Last accessed: 10 July 2020

'Polio Eradication Initiative', nd. Last accessed: 10 August 2020

Defeating malaria in Asia, the Pacific, Americas, Middle East and Europe'

November 2020. Last accessed 10 August 2020

'Antimicrobial resistance', nd. Last accessed: 10 August 2020

HIV/AIDS', nd. Last accessed: 10 August 2020

Environmental health', nd. Last accessed: 10 August 2020

'<u>Communicable disease surveillance and response</u>', nd. Last accessed: 10 August 2020

'Blood safety', nd. Last accessed: 10 August 2020

UNICEF, 'Improving Quality of Care Around the Time of Birth in Pakistan', 2019. Last accessed: 14 August 2020

# Version control

### Clearance

Below is information on when this note was cleared:

- version 2.0
- valid from 16 September 2020

Changes from last version of this note

Updated country information.