

Child and Adolescent Mental Health



Sanaa Al-Harabsheh
Ahsan Nazeer
Shekhar Saxena
Susan Clelland
Samya Al-Abdulla
Fozia Tabakkouyat
Muhammad Waqar Azeem
Iain Tulley





POLICY BRIEFING

CHILD AND ADOLESCENT MENTAL HEALTH: CURRENT STATUS, CHALLENGES AND RECOMMENDATIONS FOR POLICY MAKERS



WITH CONTRIBUTIONS FROM

Sanaa Al-Harashseh, Senior Associate of Research and Policy, World Innovation Summit for Health, Qatar Foundation, Doha, Qatar

Ahsan Nazeer, Division Chief, Child and Adolescent Psychiatry, Sidra Medicine; Associate Professor, Clinical Psychiatry, Weill Cornell Medicine, Doha, Qatar

Shekhar Saxena, Professor of the Practice of Global Mental Health, Global Health and Population, Harvard T H Chan School of Public Health, Harvard University, Cambridge, MA, USA

Susan Clelland, Acting Executive, Director Office, General Directorate of Health Affairs, Department National Mental Health Office, Ministry of Public Health (MoPH), Doha, Qatar

Samya Al-Abdulla, Senior Consultant of Family Physician and Executive Director of Operations, Primary Health Care Corporation (PHCC), Doha, Qatar

Fozia Tabakkouyat, Senior Project Manager, Primary Health Care Corporation (PHCC), Doha, Qatar

Muhammad Waqar Azeem, Chair, Department of Psychiatry, Sidra Medicine, Doha, Qatar; Professor, Psychiatry, Weill Cornell Medical College, Doha, Qatar

Iain Tulley, Chief Executive, Mental Health Service, Hamad Medical Corporation (HMC), Doha, Qatar; National Health Strategy Lead, Mental Health and Wellbeing, Ministry of Public Health (MoPH), Doha, Qatar

POLICY STEERING COMMITTEE

Dr Mariam Abdulmalik, Managing Director, PHCC

Ms Houriya Ahmed, Director of Policy Hub, QF

Ms Sultana Afdhal, CEO, WISH

Eng Omar Al Ansari, Secretary General, QRD

Mr Ali Abdallah Al-Dabbagh, Deputy Director General for Planning, QFFD

Mr Khalid Al-Emadi, Chief Executive Officer, Al Ahli Hospital

Dr Asmaa Ali Al Thani, Dean of College of Health Sciences, Biomedical Research Center, QU

Dr Shk. Mohammed Al Thani, Director of Public Health, MoPH

Ms Yousra Hammad Bagadi, Health Specialist, QFFD

Dr Roberto Bertollini, Advisor to the Minister, MoPH

Dr David Flory, Chief of Tertiary Hospitals Group, HMC

Dr Richard O'Kennedy, Vice President, QF Research, Development and Innovation, QF

Dr M. Walid Qoronfleh, Director, Research and Policy, WISH

Prof Javaid Sheikh, Dean, Weil Cornell Medical College in Qatar

Dr Eduard Stuenkel, Dean, College of Health and Life Sciences, HBKU

Prof Egon Toft, Vice President, Medical and Health Sciences, QU

LIST OF ABBREVIATIONS

AA-HA	Global Accelerated Action for the Health of Adolescents
ACGME-I	Accreditation Council for Graduate Medical Education-International
ADHD	Attention deficit hyperactivity disorder
CAMHS	Child and adolescent mental health services
COVID-19	Coronavirus disease of 2019
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DALYs	Disability-adjusted life years
DSM-5	Diagnostic and Statistical Manual of Mental Disorders-5
EMR	Eastern Mediterranean Region
HMC	Hamad Medical Corporation
HPA	Hypothalamic-pituitary-adrenal axis
ICD-10	International Classification of Diseases, version 10
MENA	Middle East and North African
MHWT	Mental Health and Wellbeing Taskforce
MoEHE	Ministry of Education and Higher Education
MoPH	Ministry of Public Health
NYPWS	Naufar Young Persons Wellness Service
PHCC	Primary Health Care Corporation
QCHP	Qatar Council for Healthcare Practitioners
QNDS	Qatar National Development Strategy
QNHS	Qatar National Health Strategy
QNMHS	Qatar National Mental Health Strategy
QNV	Qatar National Vision 2030
S-CAP	Sidra Child Advocacy Programme
SDGs	Sustainable Development Goals
UN	United Nations
WHO	World Health Organization
WISH	World Innovation Summit for Health

EXECUTIVE SUMMARY

This policy brief provides a summary of the current status and recent developments in the area of children and adolescents' (ages 0–18) mental health (CAMH) in Qatar while also referring to the challenges across the globe in this area. It also highlights the existing problems and gaps in the services/care; policy and legislation; public knowledge and awareness; research, monitoring, and evaluation; promotion and prevention programmes; children and families' involvement; and partnerships, and it provides recommendations to achieve better outcomes.

The mental health of children and adolescents exists on a continuum and is an integral part of their overall wellbeing. Better mental health during the early years of life builds a foundation for future learning, health and life success. Alternatively, poor mental health is associated with low educational achievements, unemployment, substance use, disability, increased risk-taking behaviours, self-harm and inadequate self-care – all of which increase the lifetime risk of morbidity and mortality while placing an increased burden on the national resources.

Despite the recent progress across mental health services for children and adolescents in Qatar, significant challenges and gaps exist in the current landscape. These services are unbalanced and understaffed and have budgetary problems. This situation is further compounded by a lack of dedicated CAMH policies and legislation and cross-sector collaboration. Other challenges that are important to note are lack of trained primary care staff in the mental health needs of the children and adolescents, the stigma and lack of awareness about the need for child and adolescent mental health services (CAMHS) among the healthcare executives and policy makers as well as limited communities' engagement, lack of research in this area and minimal monitoring and evaluation system for current services, limited school-based mental health support and potential harms of excessive use of information technology.

SUMMARY OF KEY RECOMMENDATIONS

Globally, governments are increasingly being faced with several challenges and gaps that pose a barrier to the accessibility of high-quality care for the mental health of children and adolescents. Each country varies in its progress in mitigating these challenges and the resources that it can deploy. Therefore, based on a review of the global and national situation, we recommend adopting the following action plan to achieve better mental health and healthcare delivery outcomes for children and adolescents in Qatar:

- Develop comprehensive, integrated, balanced and responsive child and adolescent's mental health services across the healthcare system.
- Develop and implement the whole of the government policies and human-rights-compliant legislation to protect and promote the mental health of children and adolescents.
- Involve communities in the promotion and establishment of child and adolescent's mental health services.
- Establish a robust monitoring and evaluation system for child and adolescent's mental health.

INTRODUCTION AND BACKGROUND

It is well documented that early years of life are critical periods for mental health development as more than half of the psychiatric problems start during childhood and adolescent years, and many of these continue throughout adulthood.³ In the absence of appropriate support, challenging experiences during the early years can disrupt the healthy development and have detrimental effects on the future mental and physical health of children and adolescents.⁴ Estimates suggest that about 10–20% of children (ages 0–18) worldwide experience mental health disorders,⁵ a number that has increased significantly as the world currently fights the coronavirus pandemic (COVID-19). If left untreated, these disorders severely influence children's and adolescents' development, their educational achievement and their wellbeing and result in a high social and economic cost to the nations.⁵



Mental health wellbeing of children and adolescents was prominently covered within the World Health Organization (WHO) mental health action plan 2013–2020 and the United Nations (UN) Sustainable Development Goals (SDGs) that all countries have committed to achieving by the year 2030. The WHO mental health action plan 2013–2020, United Nations SDG target 3.4, the WHO Global Strategy for Women's, Children's, and Adolescents' Health 2016–2020 and the Global Accelerated Action for the Health of Adolescents (AA-HA) implementation guidance have increased awareness of children's and adolescents' mental health needs and have strengthened global commitments to improve the wellbeing of children and adolescents.⁶ The recently published Lancet Commission on Global Mental Health and Sustainable Development places significant emphasis on children and adolescents and recommends scaling up services using innovative strategies, including the use of digitally delivered interventions.⁷ However, despite the above guidance, it is well known that primary, secondary and tertiary care services for this population are grossly inadequate in high income as well as in low-to-middle-income countries, including those from the Eastern Mediterranean Region (EMR).^{1–7}

Qatar is one of the wealthiest countries in the world, with a rapidly growing population representing over 80 nationalities.⁸ As of January 2020, Qatar's total population was 2 773 221, and among this, there are approximately 631 663 children aged 0–18 years, which accounts for 23% of the total population.⁸ During the last decade, Qatar has made significant progress towards developing a world-class

healthcare system, in part because of the ambitious and visionary goals set out in the Qatar National Vision 2030 (QNV), the Qatar National Development Strategy (QNDS) 2018–2022, the Qatar National Health Strategy (QNHS) 2018–2022 and the Qatar National Mental Health Strategy (QNMHS) 2013–2018. However, despite the above progress, mental health services to children and adolescents have traditionally lagged behind adult and old-age psychiatry initiatives.⁹ Hence, a critical need exists to raise the national discussion about mental health issues in children and adolescents and to ensure that this age group has access to high-quality care and services. This policy brief, therefore, focuses on the current status and recent developments and progress in the area of mental health among children (ages 0–18) with a particular focus on Qatar. It also highlights the existing challenges and gaps in the services and provides recommendations to achieve better outcomes.

CONCEPT OF MENTAL HEALTH AS A CONTINUUM

Child and adolescent's mental health is the capacity of the individual to achieve optimal psychological functioning by gaining a sense of identity and self-worth, by building and developing sound family and peer relationships and achieving competence in psychological and social functioning.

Mental health exists in a continuum, ranging from healthy wellbeing to chronic, progressive and substantial impairment across different psychosocial domains.⁷ A mental health disorder is diagnosed when individuals meet certain signs and symptoms of an illness along with an impairment in psychosocial functioning as delineated under an accepted system of classification such as Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5)¹⁰ or International Classification of Diseases, version 10 (ICD-10).^{11–14}

THE MAGNITUDE OF MENTAL HEALTH AT GLOBAL AND EMR LEVELS

According to the WHO estimates, about 10–20% of children worldwide experience mental health disorders.⁵ Among this age group, anxiety disorders and externalising disorders, including attention deficit hyperactivity disorder (ADHD), are most prevalent. Approximately 1% of all children suffer from developmental disorders such as autism. Neuropsychiatric disorders in children and adolescents are responsible for 27%–30% of the lost disability-adjusted life years (DALYs).^{11–12} Research findings from low-to-middle-income countries, including those from the EMR, suggest higher rates of child and adolescent's mental health problems as compared to other regions of the world. In the EMR region, psychiatric disorders were accounted for 11.9 million DALYs during the period from 1990 to 2013.^{15–16}

COGNITIVE, EMOTIONAL AND SOCIAL DEVELOPMENT, DELAYED DEVELOPMENT AND DEVELOPMENTAL DISABILITIES

Social and emotional development in young children (0–5 years) is the ability to form secure relationships and regulate emotions in a socially appropriate context.¹⁷ Studies in neurosciences, brain imaging and behavioural sciences have noted critical interplay of genes, environment and

developmental stages on the child and adolescent mental health.^{18 19} For example, how we experience and express our emotions is a critical skill that begins to develop in early childhood, and deficits of self-regulation are one of the cardinal features of numerous psychiatric disorders,^{20 21} including anxiety and depression.²² Adverse childhood experiences lead to neurobiological, including structural and functional, changes in the brain and are associated with risk-taking and an unhealthy lifestyle in the later years, suggesting a lifelong effect on the brain.^{23–25}

Healthy cognitive development is associated with healthy mental health outcomes in early- to mid-adult life.^{26 27} Adequate cognitive development determines future educational achievements and social and societal status. Early adverse experiences, including childhood trauma, parental divorce, poor parenting and emotional and physical abuse, induce stress responses by influencing the hypothalamic-pituitary-adrenal axis (HPA).²⁸ Overactivation of the HPA system damages the neuronal circuitry involved in learning and emotion regulation.²⁹

RISK AND PROTECTIVE FACTORS FOR CHILDREN'S AND ADOLESCENTS' MENTAL HEALTH

Risk factors are the characteristics that, if present, make it more likely for the individual to develop a disorder. Numerous biological, psychological, social, economic and environmental risk factors can affect mental health by influencing periods of vulnerable development.³⁰ When risk factors outweigh the protective factors, the result is the emergence of mental health disorders.³¹ Several risk factors such as poor socioeconomic status, maternal substance use, abuse, bullying, marital discord, poor attachment, mental illnesses in parents, migration, discrimination, exposure to violence and conflict, social and gender inequality and exposure to natural disasters are associated with poor mental health outcomes in children and adolescents.^{32 33} Figure 1 provides an illustrative set of

mental health risk factors as well as promotion and protection strategies.^{32 33}

COMPLIANCE WITH INTERNATIONAL CONVENTIONS AND TREATIES

As an essential component of wellbeing, mental health is a fundamental human right.⁷ As such, several policy instruments were developed to promote the health and development of children and adolescents including the UN Human Rights Council Resolution 6/29 in 2007, which states that every person should have the right to the highest attainable standard of physical and mental health; the WHO Mental Health Action Plan 2013–2020, which has human rights as one of the cross-cutting principles⁷; the Convention on the Rights (1989) of the Child (CRC)³⁴; and the Convention on the Rights of Persons with Disabilities (CRPD).³⁵ Such instruments provide governments with a framework to ensure that children and adolescents with mental health and psychosocial disabilities are protected and enjoy their rights without discrimination.^{36 37} All countries and governments, therefore, are placed under a variety of commitments to take measures to change or abolish existing discriminatory laws, regulations and practices, as well as providing programmes to support the rights of persons with disabilities (Article 4).³⁸

Qatar is one of the countries that have signed and ratified the UN CRC and CRPD. In this context, Qatar has guaranteed children many rights, such as the right to health, education and social and economic care. The Article 22 of the permanent constitution of the State states that “The State shall provide care for the young and protect them from corruption, exploitation, and the evils of physical, mental and spiritual neglect.”³⁹ The children's human rights were also emphasised in QNV 2030, the first QNDS 2011–2016 and the second QNDS 2018–2022. However, laws relevant to child and adolescent mental health in Qatar, particularly regarding child protection, are not developed yet.⁴⁰



Fig 1 | An overview of risk and protective factors for children's mental health.

Source: Adapted from Commonwealth Department of Health and Aged Care, 2000 and Spence, 1996

CHILD AND ADOLESCENT MENTAL HEALTH ISSUES IN QATAR: CURRENT TRENDS AND PROGRESS

MENTAL HEALTH POLICIES IN QATAR

A formal mental health policy for Qatar was established in the 1980s.^{40 41} In 2008, the Supreme Council for Health (currently Ministry of Public Health) formed a National Mental Health Committee with assistance from the WHO to improve the mental health services in the peninsula. Later, Qatar adopted the WHO Mental Health Action Plan 2013–2020.

In 2013, QNMHS was launched under the title “Changing Minds, Changing Lives.” QNMHS emphasised the transition to community-based care, focused on raising awareness, developing specialist services to meet the needs of a specific population, developing a sustainable mental health workforce for Qatar and enacting mental health law. Additionally, following the publication of the World Innovation Summit for Health (WISH) global research study in 2016: *Autism A global Framework for Action*,⁴² the Qatar National Autism Plan was developed in 2017.

In 2018, QNHS, 2018–2022, was launched under the banner of “Our Health Our Future.” QNHS has identified “healthy children and adolescents” as one of the seven priority populations and workstreams. Another priority population that is defined in QNHS is “mental health wellbeing,” under which Child and Adolescent Mental Health Services (CAMHS) workstream are focusing on the development of CAMHS services across the State of Qatar.

MENTAL HEALTH LAW IN QATAR

In line with the WHO's EMR recommendations on the development of mental health services, Qatar's mental health law was officially issued in December 2016. This law establishes basic rules for the treatment of individuals and clarifies mental health terms in the Qatari context. The legislation includes the rights of mentally ill people, compulsory admission for treatment, mandatory community treatment, court-ordered treatment and penalties for medical staff who violate the human rights of people with mental illness. This law does not explicitly address the issues related to child and adolescent mental health.

MENTAL HEALTH AND WELLBEING GOVERNANCE

In 2018, the Ministry of Public Health (MoPH) announced Mental Health as one of the main areas of focus and created different workstreams under Mental Health and Wellbeing Taskforce (MHWB). Outlined below is the current governance structure at the national level to ensure that plans for services are coordinated accordingly.

The main aim of the CAMHS workstream is to develop and implement comprehensive care pathways to support children and adolescents with mental health issues in Qatar⁴³ (fig 2).

CHILD AND ADOLESCENT MENTAL HEALTH: CURRENT EVIDENCE AND SERVICES IN QATAR

Over the past decade, Qatar's health sector has undergone significant expansion to provide a range of high-quality healthcare services. Although CAMHS in the State of Qatar has traditionally lagged behind adult and old-age psychiatry initiatives, CAMHS in Qatar has transitioned from being virtually non-existent to state-of-the-art facilities in both semi-private and public hospitals over the last few years. In particular, a wide range of mental health services for children and adolescents are now available within Primary Health Care Corporation, Hamad Medical Corporation, Sidra Medicine, Naufar and community-based organisations.

Primary Health Care Cooperation (PHCC)

Although the focus of service provision within Primary Healthcare Corporation is primarily to support adults 18 years and above, PHCC does still provide some mental health services to children and adolescents:

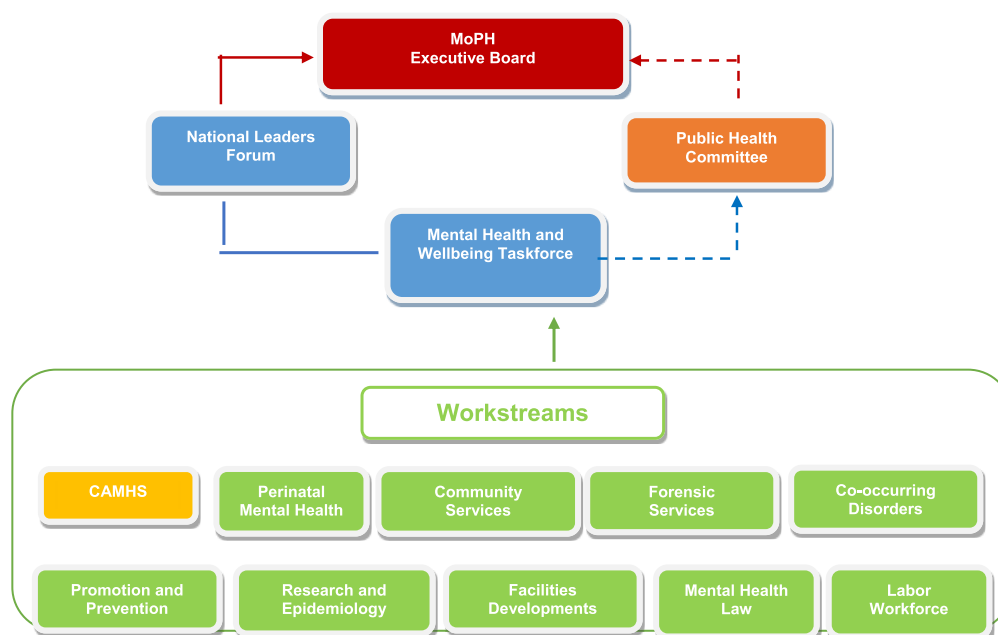
- **The PHCC School Health Services and Programme** has an element of psychosocial assessment and management of children's mental health utilising the HEADS assessment. The outcomes include early detection and management of psychosocial and behavioural problems in children. Adolescents who are identified as needing further support can be referred to either the school psychologist or Student Advisory Service at PHCC or to the external providers for specialty care.
- **The Student Advisory Service** provides assessment, evaluation and diagnosis of mental/psychological health with management and is aimed at supporting children with learning difficulties and behavioural concerns. The service consists of a psychiatrist, a psychologist, a social worker and an external consultant from Sidra. The clinic covers school-aged clients from 4 to 18 years of age.
- **The General Paediatrics Service** is managed by specialist and consultant paediatricians who provide services to the patients aged 0–18 years within the specialist centres at PHCC. Patients can access support via family physicians. The latter will assess and then refer either to the general paediatrics service in PHCC for further assistance.



Demographic breakdown (see figs 3–8)⁴⁴ shows that patients seen at PHCC are aged between 5 and 18 years, and the majority of male patients are accessing mental health services in primary care as compared to females. Higher percentages of Qatari patients are accessing primary care mental health support compared to other nationalities. A significant portion of referrals are internally managed, and 73% of patients are seen within PHCC. PHCC will manage patients with mild-to-moderate conditions, and severe cases will generally be referred to secondary or tertiary care clinics/centres. Additionally, the top 10 diagnoses for primary care are mainly patients seen by the Student Advisory Service and general paediatrics.

Hamad Medical Corporation (HMC)

Hamad Medical Corporation is the leading provider of adult mental health services in Qatar. There is a dedicated CAMH



Source: National Mental Health Framework 2019-2022; Qatar Ministry of Public Health⁴³.

Fig 2 | Mental health and wellbeing governance.

Source: National Mental Health Framework 2019–2022⁴³

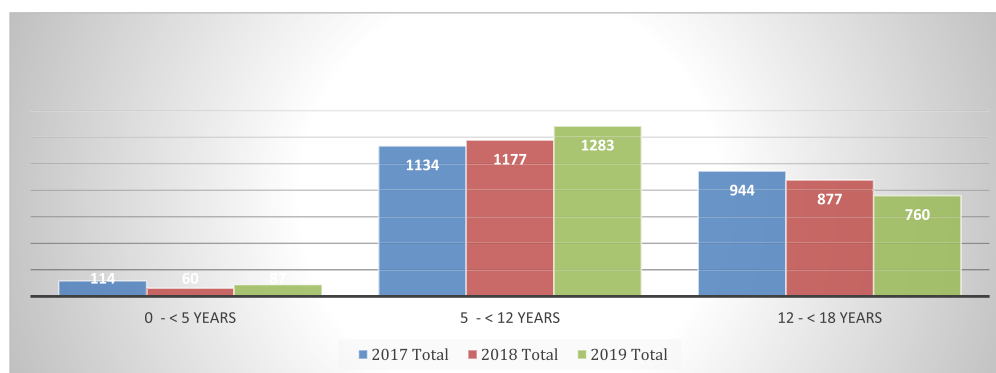


Fig 3 | Age of patients accessing children's mental health support at PHCC.

Source: Primary Healthcare Corporation (PHCC)⁴⁴

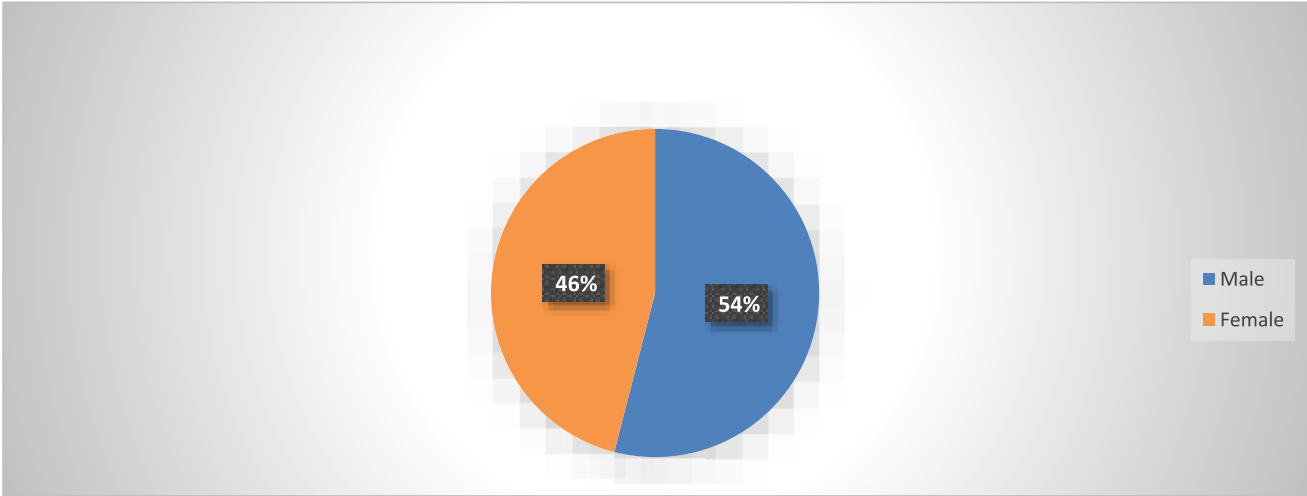


Fig 4 | Gender of patients accessing children's mental health support.
Source: Primary Healthcare Corporation (PHCC)⁴⁴

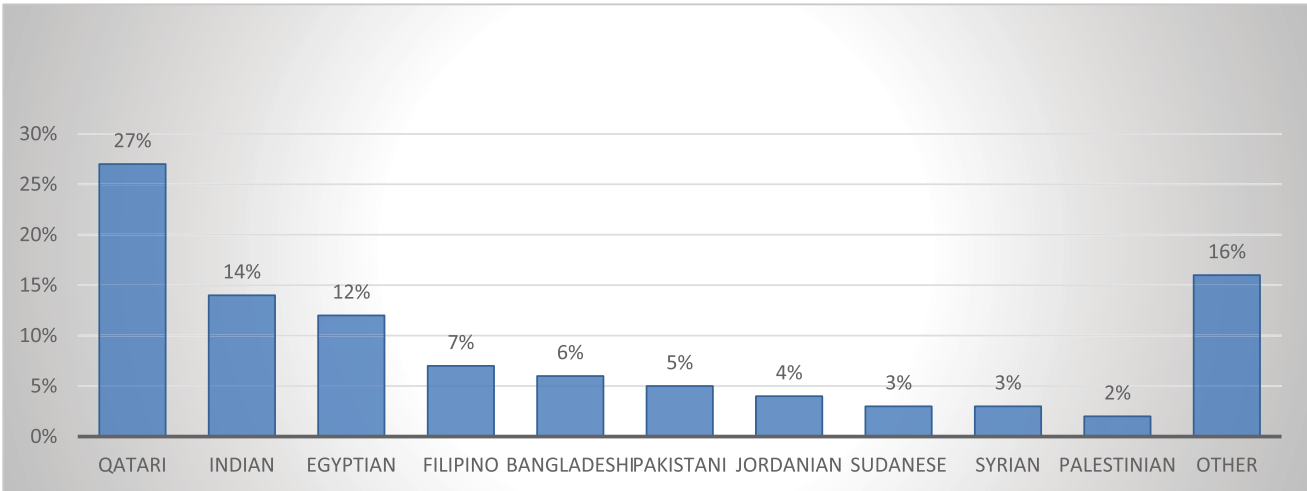


Fig 5 | Nationality of patients accessing children's mental health support – 2017–2019.
Source: Primary Healthcare Corporation (PHCC)⁴⁴

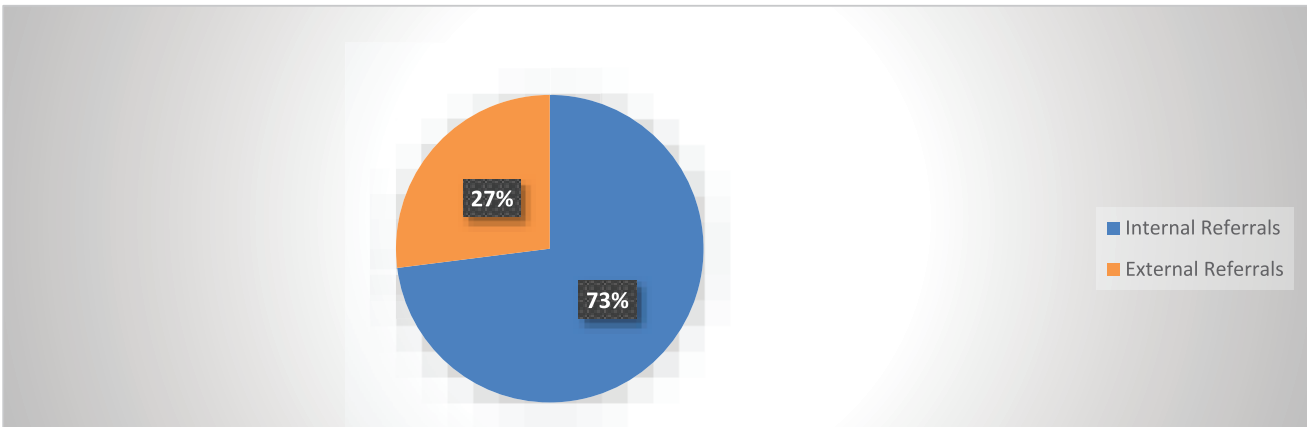


Fig 6 | Referral source.
Source: Primary Healthcare Corporation (PHCC)⁴⁴

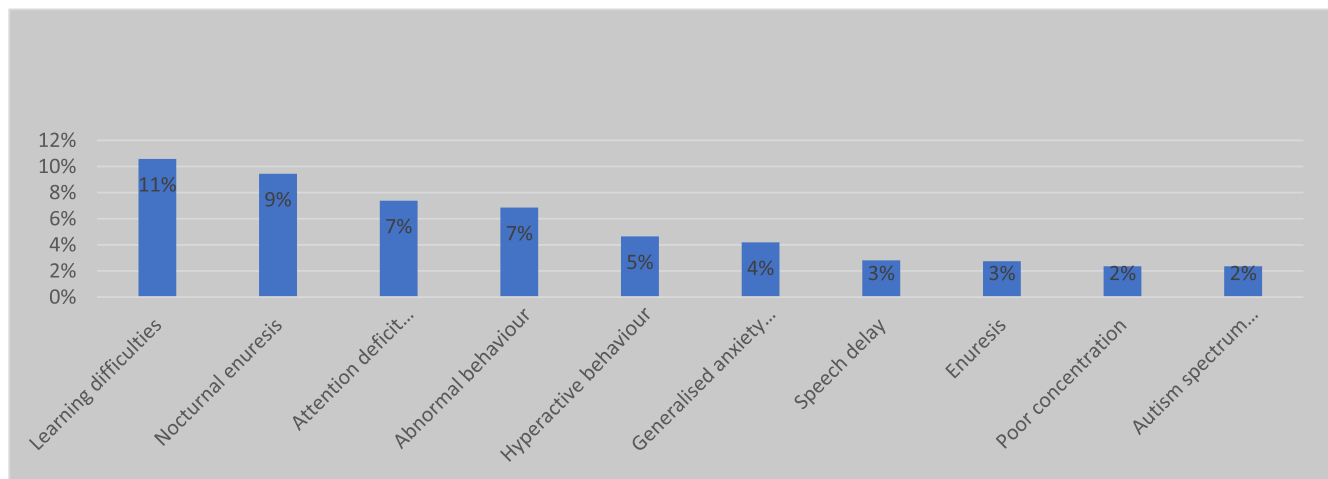


Fig 7 | Top 10 diagnoses of *internal* referrals 2018–2019.
Source: Primary Healthcare Corporation (PHCC)⁴⁴

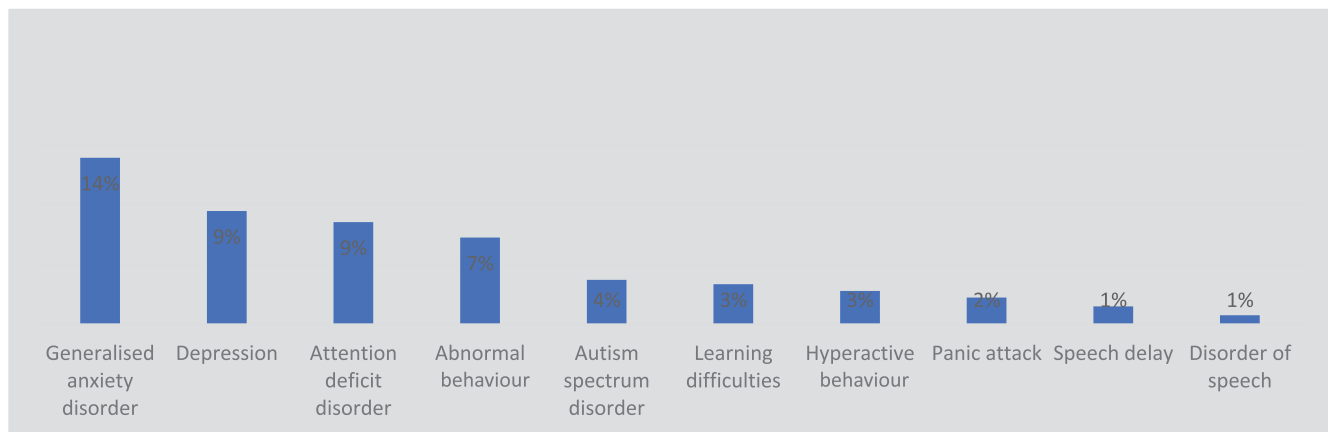


Fig 8 | Top 10 diagnoses of *external* referrals to HMC/Sidra in 2018–2019.
Source: Primary Healthcare Corporation (PHCC)⁴⁴

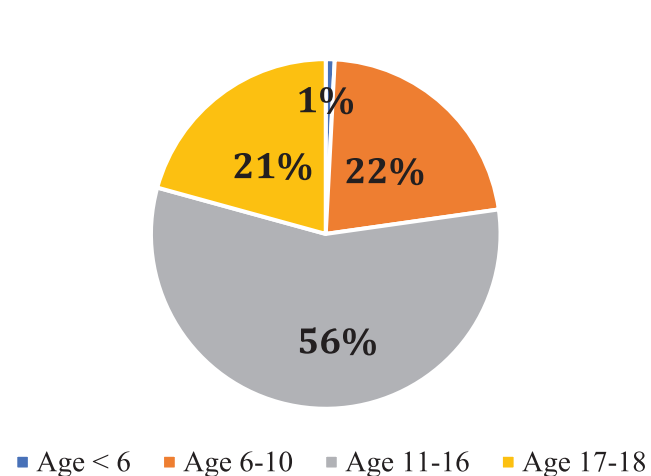


Fig 9 | Patients' ages, CAMHS 2019.
Source: Hamad Medical Corporation⁴⁵

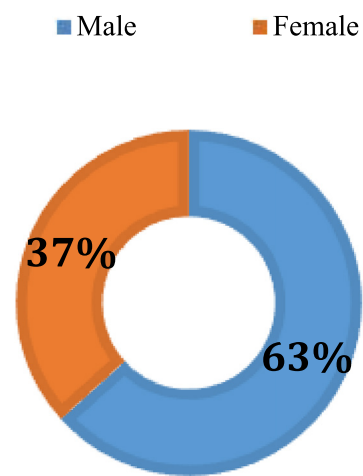


Fig 10 | Gender rate, CAMHS 2019.
Source: Hamad Medical Corporation⁴⁵

service that was established in 2017 and provides assessment and treatment of a wide range of child and adolescent mental health problems. The service also undertakes consultation and liaison work with other agencies across Qatar.



Current evidence shows that (see figs 9–12)⁴⁵ patients seen at HMC CAMHS are between 5 and 18 years, and the majority who are accessing mental health services are between ages 11 and 16 years. Male patients are more likely to access mental health services as compared to females (63% vs 37%). Higher percentages of Qatari and Egyptian patients are accessing the service as compared to other nationalities. Most of the families sought treatment for ADHD (30%), anxiety and depressive disorder (20%) and autism spectrum disorder (18%).⁴⁴ About 45% of the referrals to CAMHS are from HMC, 18% from PHCC and 37% from other organisations.

Sidra Medicine

Sidra Medicine is a tertiary care hospital established by Qatar Foundation for Education, Science, and Community Development that opened its doors in June 2016. Department of Psychiatry at Sidra Medicine is an academic department, and within a short period, Sidra CAMHS has established itself as a leader in the Middle East and

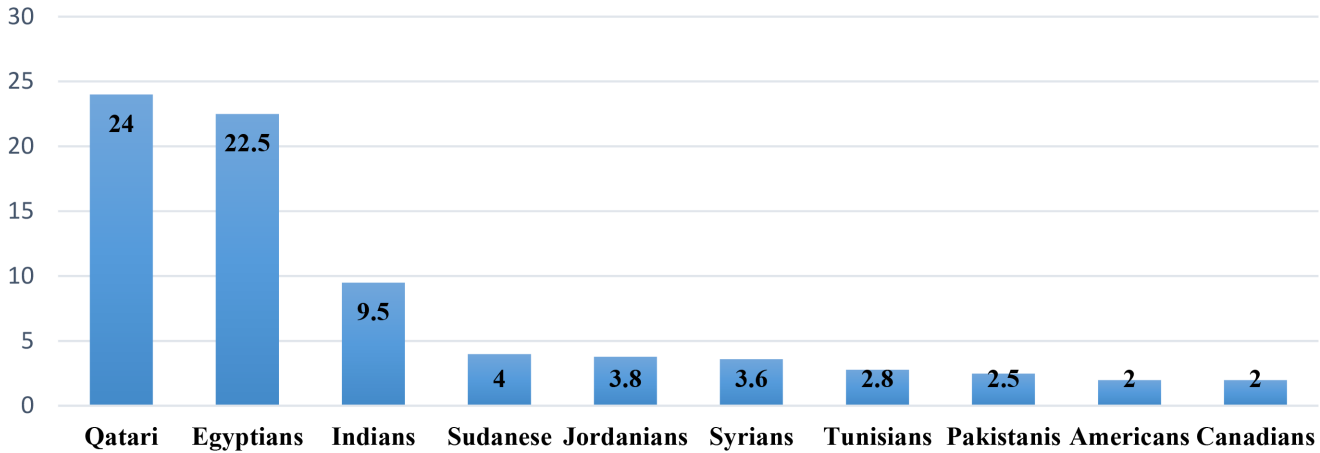


Fig 11 | Top 10 nationalities, CAMHS 2019.
Source: Hamad Medical Corporation⁴⁵

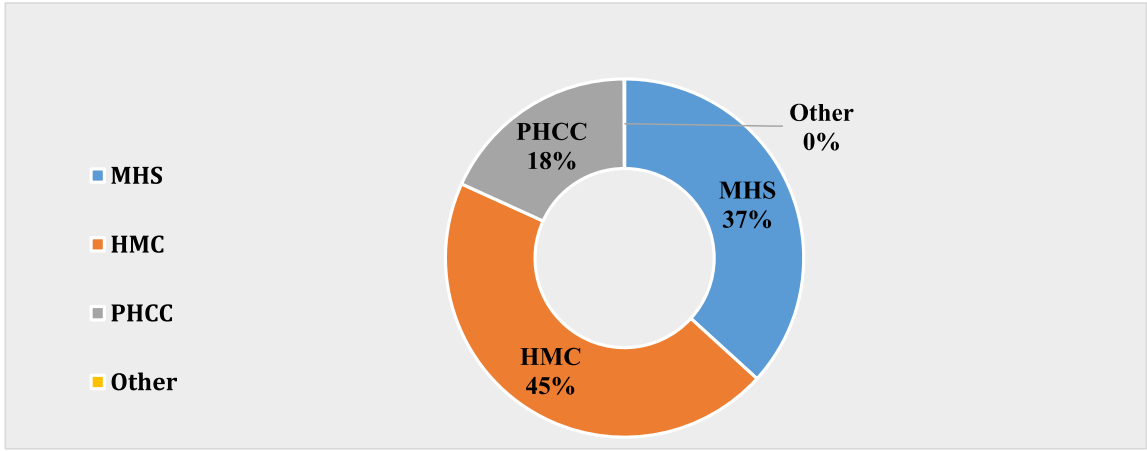


Fig 12 | Source of referrals to CAMHS 2019.
Source: Hamad Medical Corporation⁴⁵

North African (MENA) region. Sidra has pioneered various educational and training programmes, including the world's first and only Accreditation Council for Graduate Medical Education-International (ACGME-I) Child and Adolescent Psychiatry Fellowship programme. The faculty in Sidra CAMHS is involved in various cutting-edge research projects, including areas of autism, developmental disabilities, genetics, ADHD and conditions at the interface of medical and psychological issues.

The Division of Child and Adolescent Psychiatry provides a wide array of services tailored to children and families. It provided 24/7 coverage to Sidra Emergency Department as well as consultation-liaison service to Sidra medical inpatient units. Sidra CAMHS also operates two inpatient beds on the general paediatric floor that are slightly modified and are suitable to admit the moderately complex child and adolescent mental health patients.



The following (see figs 13–18)⁴⁶ are the characteristics of the children and adolescents attending the Sidra CAMHS outpatient clinic. Data appear to be in line with the international prevalence statistics.

Child abuse and neglect services

At present, data about child abuse and neglect in Qatar are limited; however, from community surveys, one in five children in Qatar likely experience some form of abuse. The organisation Protection and Social Rehabilitation Centre (AMAN) reported child abuse cases that ranged from 145 cases in 2007 to 853 cases in 2012.⁴⁷

Current legislation specific to the protection of children in Qatar is described in 2004 under Law No. 11, Article 269.⁴⁵ Qatar also ratified the Convention on the Rights of the Child in 1995 and has even recently committed to upholding the Convention's Optional Protocol on the sale of children, child prostitution and child pornography and the involvement of children in armed conflict.⁴⁹

The development of the Sidra Child Advocacy Programme (S-CAP) has a dedicated team of trained professionals who work together to support children and families when there are concerns of child abuse or neglect. It works closely with Police and Public Prosecution, Ministry of Interior, Protection and Social Rehabilitation Centre (AMAN), and Family Consultation Centre.

Naufar Young Persons Wellness Service (YPWS): the treatment of substance abuse for youth

The Naufar YPWS recently opened its doors to serve adolescents aged 12–18 years, with problematic substance use. The multidisciplinary team includes a consultant

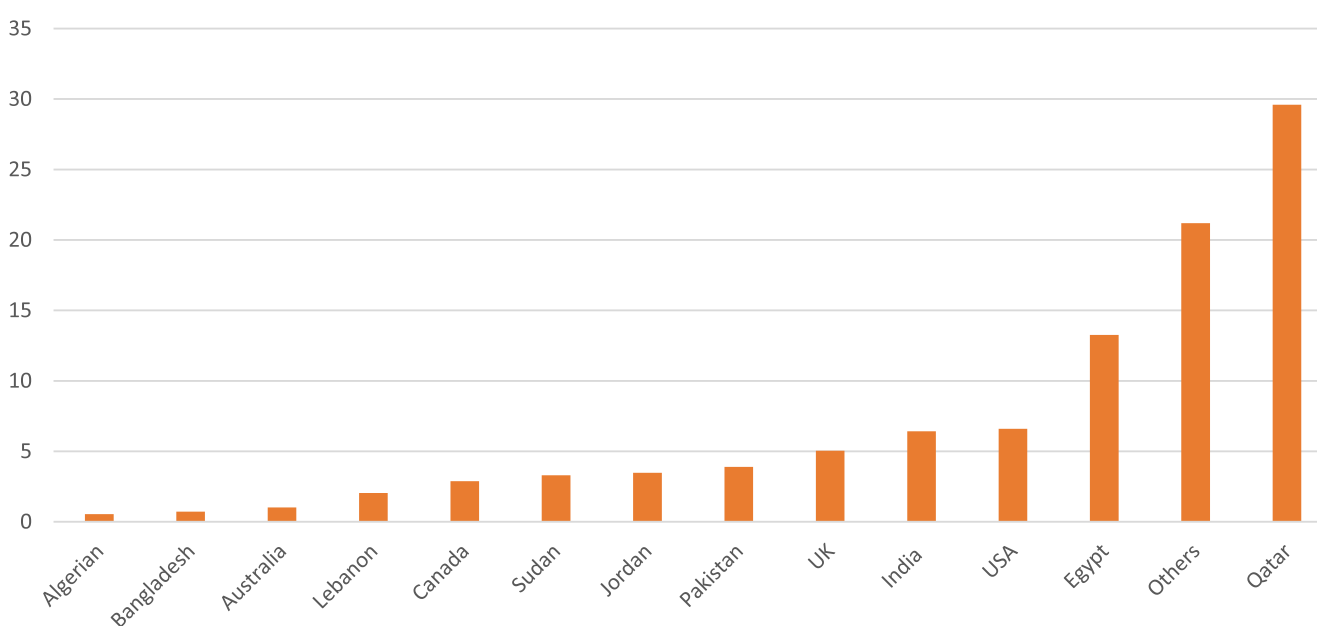


Fig 13 | Nationality of patient accessing CMHS at Sidra in 2019.
Source: Sidra Medicine⁴⁶

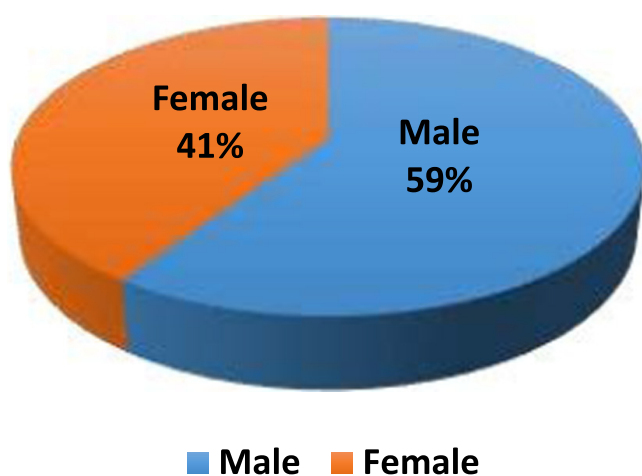


Fig 14 | Gender ratio of patient accessing CMHS at Sidra in 2019.
Source: Sidra Medicine⁴⁶

child and adolescent psychiatrist, primary care physician, family therapist, occupational therapist, social worker, physiotherapist, art psychotherapist, an addiction counsellor and nursing staff.

Private sector and community-based organisations

Qatar's private health sector has also expanded in recent years and delivers a wide range of mental health services to children and adolescents. Some of the community-based organisations are the following:

- Shafallah Centre, serving children with cognitive impairment and autism
- Aman Protection and Social Rehabilitation Centre, serving victims of family violence
- Weyak Mental Health Friends Association, to improve public awareness and to reduce stigma
- Wifaq Family Consulting Centre, for developmental disability consultations

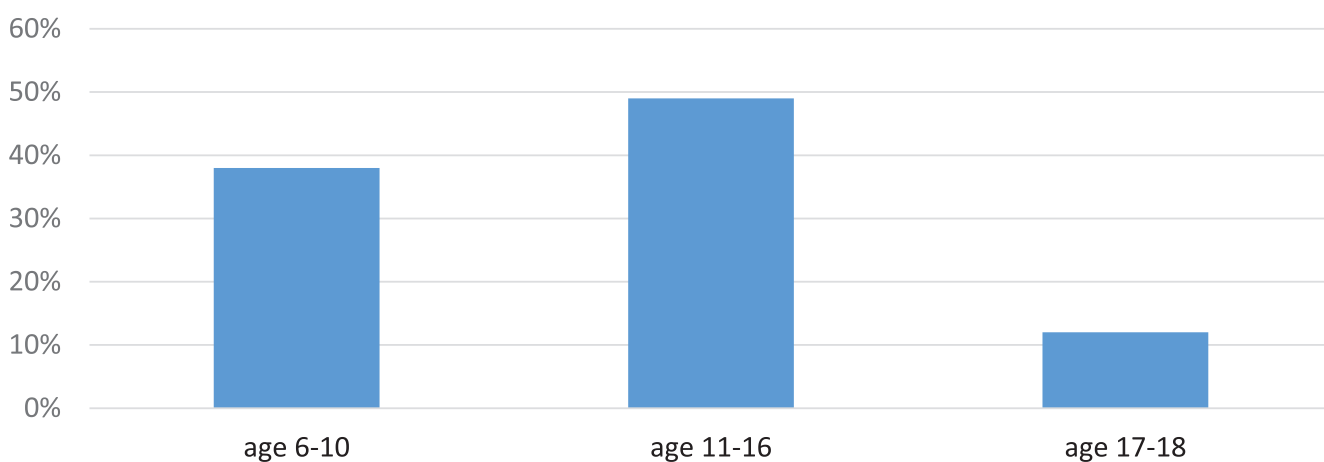


Fig 15 | Age of patient accessing CMHS at Sidra in 2019.
Source: Sidra Medicine⁴⁶

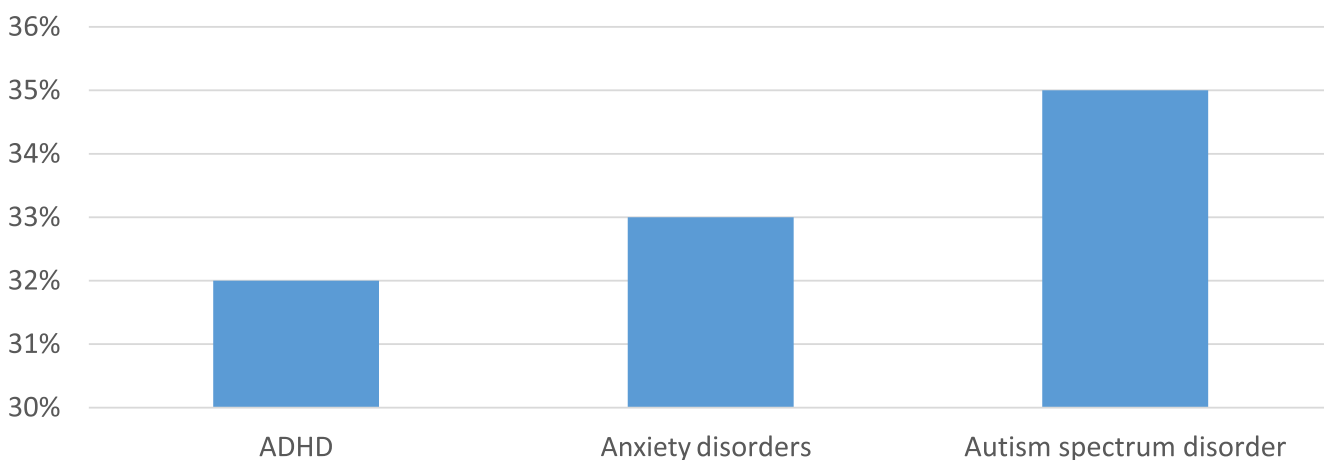


Fig 16 | Top 3 diagnosis.
Source: Sidra Medicine⁴⁶

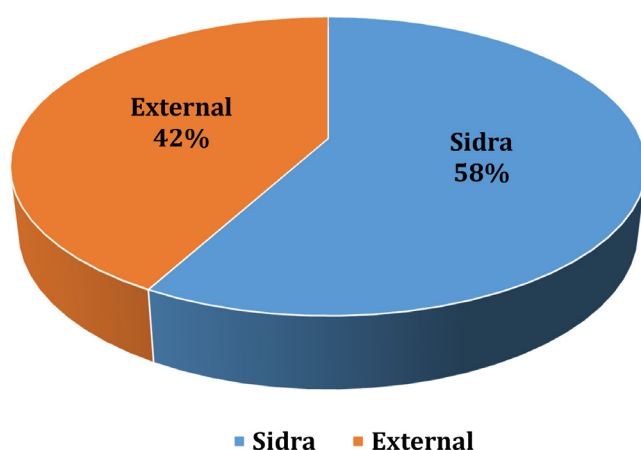


Fig 17 | Referral sources.
Source: Sidra Medicine⁴⁶

Mental health services in schools

In 2013, PHCC, the Ministry of Education and Higher Education (MoEHE) and other vital stakeholders established the *school health services and programme* to deliver an improved school health service across all schools in Qatar. The focus of this programme is on risky behaviours, accidents, obesity and adolescent reproductive health. As of February 2018, PHCC has also commenced the piloting of the WHO HEADS assessment tool in the government schools, targeting students between the ages of 10–18. This tool focuses on issues relating to the home environment, education and employment, eating, peer-related activities, drugs, sexuality, suicide/ depression and safety from injury and violence. Furthermore, in 2019, the MoPH, in collaboration with the MoEHE, launched a programme to provide psychological services in schools.

Several school psychologists have already received additional training to support their professional development.

During the last two years, Sidra Medicine has piloted a Wellness Ambassador Programme, which is a first of its kind in the MENA region. This programme is piloted in three Qatar Foundation Schools to raise awareness and decrease mental health stigma among school students. The programme covers a range of topics, including understanding wellbeing, bullying, depression, anxiety, self-harm and suicide, substance abuse, stigma and cultural misconceptions.

EPIDEMIOLOGICAL DATA ON CHILD AND ADOLESCENT MENTAL HEALTH IN QATAR

Epidemiological research on child and adolescent mental health generally is insufficient, especially in the MENA region.^{40 50–52} In Qatar, epidemiological and clinical research on mental health issues is gradually improving, yet the data on children's and adolescents' mental health are scarce. From the limited available information, it is extrapolated that the lifetime prevalence of mental health disorders within Qatar is similar to the rest of the world.^{40 53 54}

FINANCING

Over the past few years, Qatar has witnessed substantial investments in expanding the healthcare service delivery with over QR 22.7bn (\$6.2bn) allocated in 2018, only.⁵⁵ However, the allocated budget to the mental health services, as shown in fig 18, was 0.36% of the total healthcare expenditure in 2014, which slightly improved to 1.08% of the entire healthcare budget in 2018. In comparison, the global median percentage of government health budget expenditure dedicated to mental health is 2.8%.⁵⁶

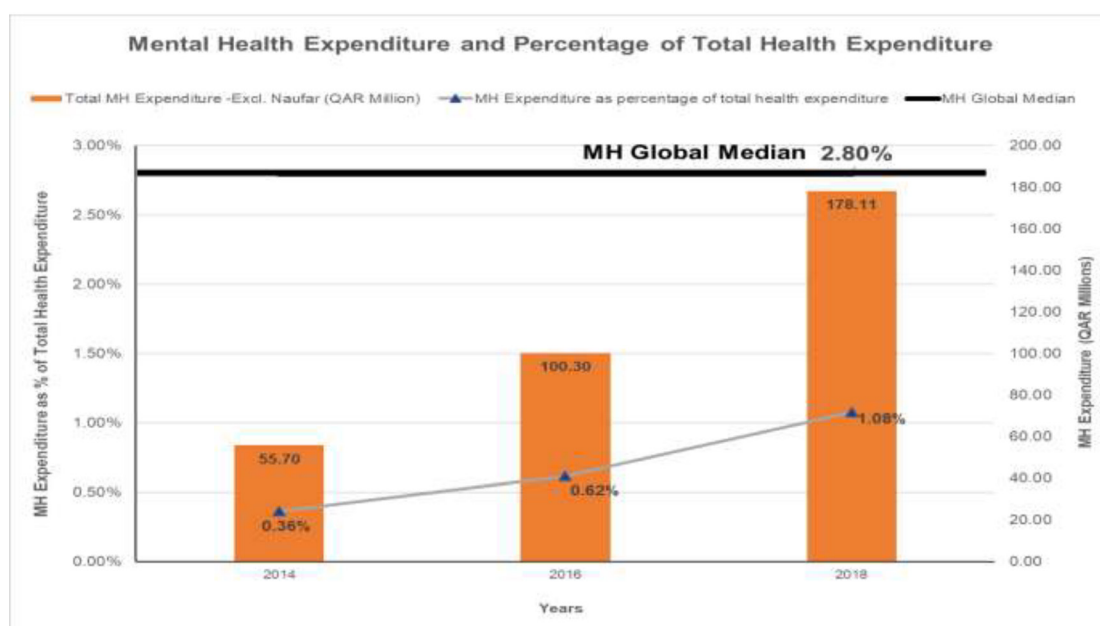


Fig 18 | Mental health expenditure and percentage of total health expenditure in Qatar 2014–2018.
Source: Ministry of Public Health Qatar⁵⁶

CHALLENGES AND OPPORTUNITIES TO HIGH-QUALITY CARE

Regardless of the key achievements, several challenges and gaps pose a barrier to the accessibility of high-quality care for the mental health of children and adolescents in Qatar. Following is a brief description of some of those challenges and gaps in Qatar while also referring to the challenges across the globe in this area:

THE EXISTING STATE AND ORGANISATION OF MENTAL HEALTH SERVICES FOR CHILDREN AND ADOLESCENTS

Mental health services for children and adolescents are inadequate and unbalanced across all over the world, and Qatar is no exception to this. There is a recognition in the healthcare sector that despite increased demand for the CAMHS services, the existing services are understaffed, and have funding problems. Scarce resources often place the existing facilities in competition, which further complicates the inter-service collaboration and delivery of care that children and families require.⁵⁷

Service availability and utilisation

- Inpatient mental health services for children and adolescents are inadequate globally, and the similar is true in Qatar. The median number of mental health beds per 100 000 population ranges below 7 in low and lower-middle-income countries to over 50 in high-income countries.^{57 58} In comparison, except for the two minimally modified general paediatric beds in Sidra, Qatar has no inpatient beds for its 631 663 children. Accordingly, patients 13 or younger gets admitted to the hospital-based paediatric unit in Sidra and youth 14 years and older get admitted to the adult psychiatry inpatient beds at Hamad adult psychiatry unit.
- There is also a lack of/insufficient services targeted to children and adolescents who are at an increased risk for mental health problems at critical points of development, such as children in adversities including migrants, refugees, broken families and families with alcohol and drug problems.
- Lack of service utilisation data also makes it difficult to accurately estimate the extent of the mental health treatment gap that currently exists regionally and nationally.⁵⁹

Treatment gap

The current state of the mental health service delivery system does not adequately meet the needs of children and adolescents. Several factors, such as the following, contribute to this⁵⁹:

- Insufficient mental health staff trained in child and adolescent mental health
- Insufficient financial resources
- Lack of public awareness and education about mental health needs of children
- Lack of a trained primary care workforce to effectively triage patients and to provide continuity of care after discharge from specialty services
- Insufficient facilities, including no psychiatric inpatient beds

Shortage of resources

Insufficient and inequitable allocation of resources, including both human and funding, is the most commonly cited challenge to the child and adolescent mental healthcare globally, regionally (EMR) and nationally. In Qatar, budgets dedicated to the CAMHS are usually mixed with other funds and are hard or impossible to link clearly with youth mental health services. As shown in fig 18, the mental health expenditure in Qatar is 1.08% of the total health budget in 2018. This level of budget allocation is significantly lower than in most developed countries.

Organisation of mental health services for children and adolescents

The system of organising mental health services has a significant bearing on their effectiveness and on whether the objectives of national mental health policies are eventually met.⁶⁰ Across the world, the development of suitable child and adolescent mental health services model of care is a challenge.^{61–75} To guide countries on how to organise services for mental health, the WHO has developed the optimal mix pyramid model (fig 19)⁷⁶, which proposes the integration of mental health services within the general healthcare.^{60 75} As illustrated in fig 21, the majority of the services should be based in the community and provided by primary care staff, followed by psychiatric services based in general hospitals and dedicated community mental health services.^{60 75} In the context of Qatar, although significant improvements and expansion in the delivery of mental health services have been achieved, the current mental healthcare system remains unbalanced, as most of the current mental health services are still provided mainly in the hospital setting.

LEGISLATION AND POLICY AS WELL AS FRAGMENTATION OF CROSS-SECTOR COLLABORATION

Comprehensive legislation and policy are crucial for protecting the rights of persons with mental disorders.⁶⁰ Several countries have a stand-alone mental health policy or law, of which most have not fully implemented or enacted it, partially due to inefficient allocation of resources for implementation. Although Qatar has developed the first QNMHS under the title “Changing Minds, Changing Lives” in 2013, at present, there is no stand-alone child and adolescent national mental health policy. Without policy guidance, there is a hazard that systems of care will be fragmented, ineffective, expensive and inaccessible.^{60 62} Also, mental health law in Qatar (the first such legislation) has been drafted and approved in 2016.^{40 41} Yet, this law does not particularly address the issues related to child and adolescent mental health.⁴⁰ The absence of a dedicated legislative for the CAMHS to safeguard the rights of children and adolescents with mental disorders is a further drawback.

Meeting the mental health needs of children and adolescents also requires an efficient cross-sector collaboration, and

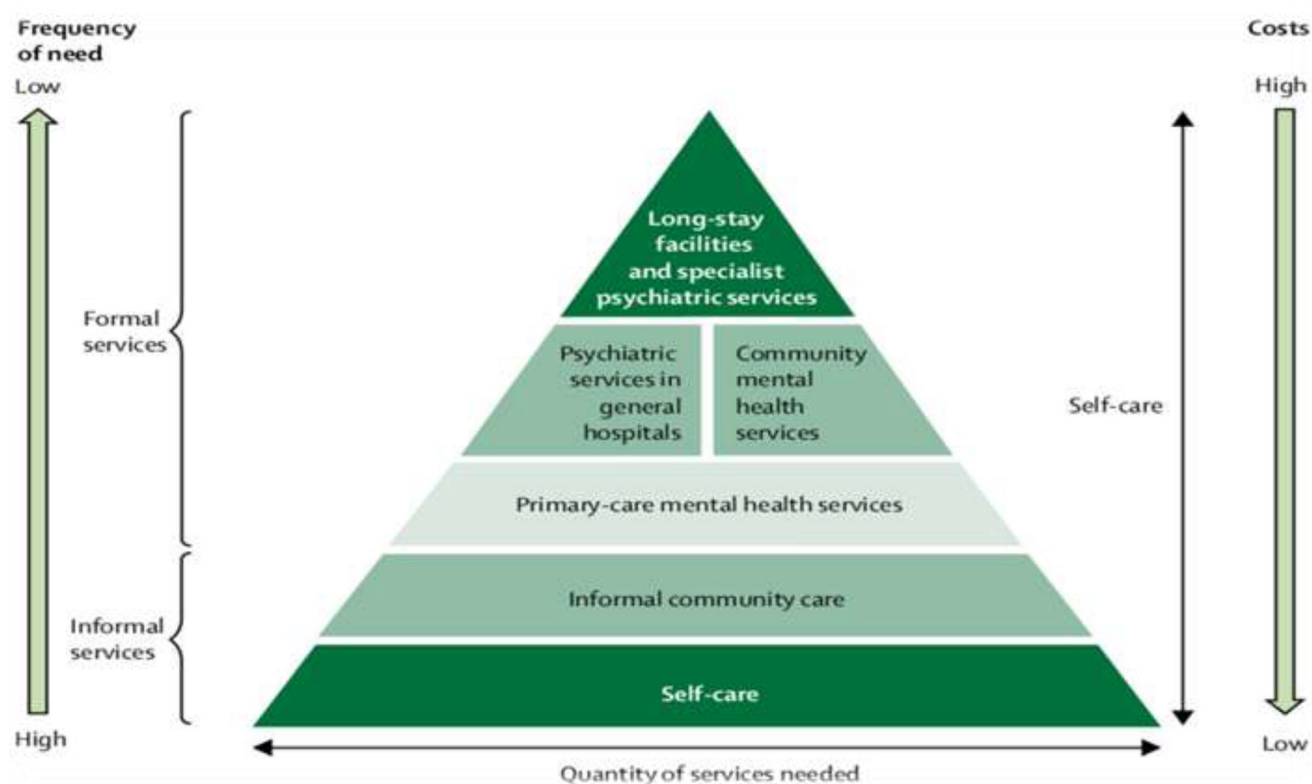


Fig 19 | WHO optimal mix pyramid of service for mental health.

Source: Adapted from the World Health Organization and World Organization of Family Doctors (Wonca)⁷⁶

limited partnership and alignment within and between services can leave children and young people without the right support at the right time.^{70–77}

Despite the excellent blueprint for an improved integrated mental health services landscape in Qatar as enunciated in the QNMHS, the reality of it is that there remain fragmentation and insufficient collaboration within and between sectors (governmental and non-governmental sectors). Unequal sharing of information between the different services and organisations involved in children's and adolescents' mental health is also a challenge to high-quality care and formulating policies and legislations.

LACK OF PUBLIC KNOWLEDGE AND AWARENESS AS WELL AS COMMUNITIES' ENGAGEMENT

Lack of understanding of the children's and adolescents' mental health conditions among both treatment seekers and treatment providers presents significant barriers to care.⁶² Compared to adult mental health, CAMH is neither understood nor placed as a priority among policy makers in most developing countries.^{63 64} In Qatar, the level of mental health knowledge is low, and misconceptions exist around the causes of mental health problems and the capabilities of people with these issues.⁵⁹ Shame and fear of stigmatisation often deter individuals and their families from acknowledging mental health problems and seeking treatment. This results in unnecessary hospitalisations and

discrimination that leads to limited access to education and employment.^{59 65}

Furthermore, young persons, parents, healthcare providers and educators are not often involved in the process of policy decision making, programme design, planning and implementation of services. Such lack of participation would adversely affect the quality and effectiveness of services provision and treatment as well as enhancing mental health literacy.

INSUFFICIENT/OR LACK OF MONITORING AND EVALUATION AS WELL AS RESEARCH AND EVIDENCE-BASED PRACTICE

The significance of monitoring and evaluating the children's and adolescents' mental health services delivery and quality is unquestionable. While some monitoring and evaluation of services and care policies are documented in most developed countries, there is insufficient data to deduce information about such pathways in Qatar. Mental health research on children and adolescents is also lacking in most developing countries, including Qatar. This gap has been recognised by the QNHS 2018–2022. On-going research that will inform the development and enhancement of tailored mental health services, health promotion initiatives and policy in Qatar is needed.⁵⁹ Developing strategies and policies without necessary regional epidemiological data leaves those strategies and policies open to failure.⁴⁰

INSUFFICIENT SCHOOL-BASED MENTAL HEALTH SUPPORT

Lack of mental health support services such as screening for mental health problems, school-based counselling, education about mental health, and skills to reduce stigma are some of the key concerns that should be addressed globally, regionally and nationally.^{67 68} Early detection and intervention can help improve resilience and the ability to succeed in school and life. In Qatar, the development of school mental health services is in its infancy. As of 2020, the majority of the schools in Qatar do not have access to a dedicated school psychologist to help students with the range of emotional challenges they might face.⁶⁹ A combination of need and a scarcity of trained practitioners ultimately led the Qatar Council for Healthcare Practitioners (QCHP) to start licensing the clinicians with bachelor's degrees in psychology to provide mental health services within the school system.^{40 69} Yet, schools across the world still have an unprecedented opportunity to promote, raise awareness and improve the mental health and the wellbeing of children and adolescents. Schools can play an essential role in supporting the mental health of their students from tackling bullying, identifying the early signs of mental health problems and promoting wellbeing through all aspects of school life.



EXCESSIVE USE OF DIGITAL TECHNOLOGY AMONG CHILDREN AND ADOLESCENTS

Due to the widespread use of the internet in Qatar, online safety for youth has arisen as a serious cause for concern of parents and the government. A survey administrated by Qatar Ministry of Transport and Communication between 2014-2015 indicated that 100% of Qatari youth (age 12-17) have access to the internet and spend an average of 34 hours per week on a variety of digital devices.⁷⁰ There is growing evidence that the youth who overuse digital technology can experience a host of mental health problems such as anxiety, depression, anger and loneliness. Online bullying and the effect of children and young people accessing inappropriate websites may promote eating disorders, self-harm, suicide or other harmful behaviors.⁷¹⁻⁷³ Yet, opportunities also exist to build online communities and social networks where children and young people can discuss personal and health issues and seek more informal supports.⁵⁹ Digital technology can also help to educate the public about common mental disorders, track high-risk situations with wearable sensors and send real-time alerts to caregivers, thus ensuring that patients do not get lost to follow-up.⁷⁰⁻⁷⁴ Additionally, digital technology could be integrated entirely in the healthcare system to monitor health-related activities and outcomes.



RECOMMENDATIONS AND NEXT STEPS

To address the challenges and gaps mentioned above and based on a review of the global and national situation, we recommend adopting the following action plan to achieve better mental health and healthcare delivery outcomes for children and adolescents in Qatar:

1. Develop comprehensive, integrated, balanced, and responsive child and adolescent mental health services across the healthcare system.
 - 1.1. Increase specialist care facilities for child and adolescent mental health.
 - 1.2. Increase the capacity of the primary healthcare and education systems to identify and provide basic care for the child and adolescent mental health problems.
 - 1.3. Establish referral pathways within health and education systems for identification and care for the child and adolescent mental health problems.
 - 1.4. Increase financial and human resources for child and adolescent mental health and use these effectively.
 - 1.5. Increase focus on prevention and promotion of programmes aimed at improving the mental health conditions among children and adolescents in a range of priority settings such as schools, communities, healthcare institutions and digital environments.
 - 1.6. Expand and enhance the use of digital technology and integrate it entirely in the healthcare system to monitor health-related activities and outcomes.
2. Develop and implement the whole of the government policies and human-rights-compliant legislation to protect and promote the mental health of children and adolescents.
 - 2.1. Review policies and legislation within all relevant sectors and identify elements that require updating or strengthening.
 - 2.2. Revise policies and legislation in keeping with the international guidance and human rights conventions within a specified time frame.
 - 2.3. Identify and implement policies especially relevant for prevention of child and adolescent mental health problems.
 - 2.4. Develop a stand-alone child and adolescent national mental health policy as well as national guidelines common to all service providers that translate it into practice in Qatar.
 - 2.5. Establish administrative mechanisms to implement the policies and legislation.
 - 2.6. Establish and strengthen synergies across ministries, healthcare organisations, industry partners and educational institutions for transformational change and formulating policies and legislations.
3. Involve communities in being aware of and actively contribute to child and adolescent mental health.
 - 3.1. Develop and implement nation-wide awareness and anti-stigma programmes.
 - 3.2. Involve parents, teachers, healthcare providers and policy makers in enhancing mental health literacy.
 - 3.3. Involve young persons in mental health awareness and literacy.
4. Establish a robust monitoring and evaluation system for child and adolescent mental health.
 - 4.1. Support use of internationally accepted indicators for national monitoring.
 - 4.2. Develop and publish a yearly report on the state of child and adolescent mental health.
 - 4.3. Invest in research to identify evidence-based and culturally appropriate interventions and programmes to protect and promote child and adolescent mental health.

CONCLUSION

Mental health is an integral part of overall health, and it is wisely said that there is no health without good mental health. Childhood and adolescence is a critical period for mental health wellbeing, and about half of all mental disorders begin during this age group. If untreated, these conditions will severely influence children's development, their educational attainment and their overall wellbeing.² Early intervention is crucial, and this fact needs to be recognised by parents, healthcare workers, policy makers, healthcare leadership and national leaders.

To reduce mental health challenges among children and adolescents and improve CAMH services to achieve their desired goals, several recommendations with actionable steps were addressed in this policy brief including developing comprehensive, integrated, balanced and responsive child and adolescent's mental health services across the healthcare system; developing and implementing the whole of the government policies and human-rights-compliant legislation to protect and promote the mental health of children and adolescents; involving communities in being aware of and actively contribute to child and adolescent mental health; and establishing a robust monitoring and evaluation system for child and adolescent's mental health.

REFERENCES

- World Health Organization. *Adolescent mental health*. 2019. WHO. Available from: <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- Unicef. *Adolescent mental health: an urgent challenge for investigation and investment*. 2011. Unicef. Available from: <https://www.unicef.org/sowc2011/pdfs/Adolescent-mental-health.pdf>
- Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Arch Gen Psychiatry* 2005;62:593-602. doi:10.1001/archpsyc.62.6.593
- The Colorado Children's Campaign. *Young minds matter: supporting children's mental health through policy change*. 2015. Colorado Children's Campaign, Denver, USA. Available from: <https://www.childrenscolorado.org/globalassets/community/childrens-mental-health-policy-paper.pdf>
- World Health Organization. *Child and adolescent mental health*. 2013. WHO. Available from: https://www.who.int/mental_health/maternal-child/child_adolescent/en/
- World Health Organization. *Adolescent mental health*. 2018. WHO. Available from: https://www.who.int/mental_health/maternal-child/adolescent/en/
- Patel V, Saxena S, Lund C, et al. The Lancet Commission on global mental health and sustainable development. *Lancet* 2018;392(10157): 1553-98. doi:10.1016/S0140-6736(18)31612-X
- Qatar Ministry of Development Planning and Statistics. *Qatar social statistics 2007–2016*. 2017. Qatar Ministry of Development Planning and Statistics, Qatar. Available from: https://www.psa.gov.qa/en/statistics/Statistical%20Releases/Social/GenrealSocialStatistics/QatarSocialStatistics/Qatar_Social_Statistics_2007_2016_En.pdf
- Goodman A. The development of the Qatar healthcare system. A review of the literature. *Int J Clin Med* 2015;6:177-85. doi:10.4236/ijcm.2015.63023
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. APA, 2013.
- World Health Organization. *ICD-10: international statistical classification of diseases and related health problems: tenth revision*. 2nd ed. World Health Organization, 2004.
- Kessler RC, Wang PS. The descriptive epidemiology of commonly occurring mental disorders in the United States. *Annu Rev Public Health* 2008;29(1):115-29. doi:10.1146/annurev.publhealth.29.020907.090847
- Paus T, Keshavan M, Giedd JN. Why do many psychiatric disorders emerge during adolescence? *Nat Rev Neurosci* 2008;9(12):947-57. doi:10.1038/nrn2513
- Reef J, van Meurs I, Verhulst FC, van der Ende J. Children's problems predict adults' DSM-IV disorders across 24 years. *J Am Acad Child Adolesc Psychiatry* 2010;49(11):1117-24.
- World Health Organization. *Maternal, child, and adolescent mental health: challenges and strategic directions for the Eastern Mediterranean Region*. World Health Organization, Regional Office for the Eastern Mediterranean, 2011.
- Nahla Khamis Ibrahim NK. *Epidemiology of mental disorders in the Eastern Mediterranean Region*. 2019. International, UK. Available from: https://www.researchgate.net/publication/334067073_Epidemiology_of_Mental_Disorders_in_the_Eastern_Mediterranean_Region
- Shaffer A, Yates TM, Egeland BR. The relation of emotional maltreatment to early adolescent competence: developmental processes in a prospective study. *Child Abuse Negl* 2009;33(1):36-44. doi:10.1016/j.chiabu.2008.12.005
- Darling-Churchill KE, Lippman L. Early childhood social and emotional development: advancing the field of measurement. *J Appl Dev Psychol* 2016;45:1-7. doi:10.1016/j.appdev.2016.02.002
- Giedd JN, Raznahan A, Alexander-Bloch A, Schmitt E, Gogtay N, Rapoport JL. Child psychiatry branch of the National Institute of Mental Health longitudinal structural magnetic resonance imaging study of human brain development. *Neuropsychopharmacology* 2015;40(1):43-9. doi:10.1038/npp.2014.236
- Strang NM, Chein JM, Steinberg L. The value of the dual systems model of adolescent risk-taking. *Front Hum Neurosci* 2013;7:223. doi:10.3389/fnhum.2013.00223
- Dvir Y, Ford JD, Hill M, Frazier JA. Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities. *Harv Rev Psychiatry* 2014;22(3):149-61. doi:10.1097/HRP.000000000000014
- McLaughlin KA, Kubzansky LD, Dunn EC, Waldinger R, Vaillant G, Koenen KC. Childhood social environment, emotional reactivity to stress, and mood and anxiety disorders across the life course. *Depress Anxiety* 2010;27(12):1087-94. doi:10.1002/da.20762
- Kerker BD, Zhang J, Nadeem E, et al. Adverse childhood experiences and mental health, chronic medical conditions, and development in young children. *Acad Pediatr* 2015;15(5):510-7. doi:10.1016/j.acap.2015.05.005
- American Psychological Association (APA). *Adverse childhood experiences (ACE) study: leading determinants of health. PsycEXTRA Dataset*. 2010.
- Heim C, Nemeroff CB. The role of childhood trauma in the neurobiology of mood and anxiety disorders: preclinical and clinical studies. *Biol Psychiatry* 2001;49(12):1023-39. doi:10.1016/S0006-3223(01)01157-X
- Batty GD, Deary IJ, Macintyre S. Childhood IQ and life course socioeconomic position in relation to alcohol induced hangovers in adulthood: the Aberdeen children of the 1950s study. *J Epidemiol Community Health* 2006;60(10):872-4. doi:10.1136/jech.2005.045039
- Whalley LJ, Deary IJ. Longitudinal cohort study of childhood IQ and survival up to age 76. *BMJ* 2001;322(7290):819. doi:10.1136/bmj.322.7290.819
- Hatch SL, Jones PB, Kuh D, Hardy R, Wadsworth MEJ, Richards M. Childhood cognitive ability and adult mental health in the British 1946 birth cohort. *Soc Sci Med* 2007;64(11):2285-96. doi:10.1016/j.socscimed.2007.02.027
- Brown ES, Varghese FP, McEwen BS. Association of depression with medical illness: does cortisol play a role? *Biol Psychiatry* 2004;55(1): 1-9. doi:10.1016/S0006-3223(03)00473-6
- Frick PJ. Developmental pathways to conduct disorder: implications for future directions in research, assessment, and treatment. *J Clin Child Adolesc Psychol* 2012;41(3):378-89. doi:10.1080/15374416.2012.664815
- Wille N, Bettge S, Ravens-Sieberer U. Risk and protective factors for children's and adolescents' mental health: results of the BELLA study. *Eur Child Adolesc Psychiatry* 2008;17(S1):133-47. doi:10.1007/s00787-008-1015-y
- Hammen C. Longitudinal study of diagnoses in children of women with unipolar and bipolar affective disorder. *Arch Gen Psychiatry* 1990;47(12):1112. doi:10.1001/archpsyc.1990.01810240032006
- World Health Organization (WHO). *Risks to mental health: an overview of vulnerabilities and risk factors*. WHO Discussion Paper. World Health Organization, 2012.
- Convention on the rights of the child*. United Nations General Assembly, 1989.
- Convention on the rights of persons with disabilities*. United Nations General Assembly, 2006.
- World Health Organization and the Gulbenkian Global Mental Health Platform. *Promoting rights and community living for children with psychosocial disabilities*. World Health Organization, p. 34, 2015.

- 37 Carlson M. Child rights and mental health. *Child Adolesc Clin N Am* 2002;10(4):825-39. doi:10.1016/S1056-4993(18)30033-6
- 38 World Health Organization. *Atlas: child and adolescent mental health resources: global concerns, implications for the future*. World Health Organization, p. 12, 2005.
- 39 *The permanent constitution of the State of Qatar*. 2004. Ministry of Justice, Qatar. Available from: <https://www.almeezan.qa/LawView.aspx?opt&LawID=2284&language=en>
- 40 Gilstrap L, Azeem M, Hashemi N, Nazeer A. The child and adolescent mental health landscape in the State of Qatar. *Int Public Health J* 2020;12(4).
- 41 Abou-Saleh MT, Ibrahim MA. Mental health law in Qatar. *Int Psychiatry* 2013;10(4):88-90. doi:10.1192/S1749367600004045
- 42 Munir K, Lavelle T, Helm D, Thompson D, Prestt J, Azeem MW. Autism: a global framework for action. World Innovation Summit for Health, 2016.
- 43 Ministry of Public Health. *National mental health framework 2019–2022*. Ministry of Public Health, Qatar. 2019.
- 44 Primary Healthcare Corporation (PHCC). Mental health Data among children. PHCC, Qatar. 2020.
- 45 Hamad Medical Corporation. *Child and adolescent mental health services*. Hamad Medical Corporation, Qatar. 2020.
- 46 Sidra Medicine. Mental health Data among children & Adolescents. Sidra Medicine, Qatar. 2020.
- 47 Ministry of Development Planning and Statistics. *Qatar's fourth national human development report: realising Qatar National Vision 2030: the right to development*. 2015.
- 48 Almeezan. Law No. 11 of 2004 Issuing the Penal Code. Exposing children to danger, 268 Article. Ministry of Justice, Qatar, 2004.
- 49 United Nations Human Rights Office of the High Commissioner-Qatar 2019 [Available from: <https://www.ohchr.org/EN/Countries/MENARegion/Pages/QAIndex.aspx>.
- 50 Sohanni M, Murray GK, Jokelainen J, Croudace T, Jones PB. The persistence of developmental markers in childhood and adolescence and risk for schizophrenic psychoses in adult life. A 34-year followup of the Northern Finland 1966 birth cohort. *Schizophr Res* 2004;71(2-3):213-25. doi:10.1016/j.schres.2004.03.008
- 51 Gater R, Saeed K. Scaling up action for mental health in the Eastern Mediterranean Region: an overview. *East Mediterr Health J* 2015;12(7):535-45. doi:10.26719/2015.21.7.535
- 52 Kieling C, Baker-Henningham H, Belfer M, et al. Child and adolescent mental health worldwide: evidence for action. *Lancet* 2011;378(9801):1515-25. doi:10.1016/S0140-6736(11)60827-1
- 53 Bener A, Ghuloum S, Dafeeah EE. Prevalence of common phobias and their socio-demographic correlates in children and adolescents in a traditional developing society. *Afr J Psychiatry* 2011;14(2):140-5. doi:10.4314/ajpsy.v14i2.6
- 54 Ghuloum S, Ibrahim MA. Psychiatry in Qatar. *Int Psychiatry* 2006;3(4):16-8. doi:10.1192/S1749367600004975
- 55 The Heritage Foundation. *Index of economic freedom*. 2019. The Heritage Foundation, Washington DC, USA. Available from: www.heritage.org/index/country/qatar
- 56 Ministry of Public Health Qatar. National Mental Health Office. Ministry of Public Health, Qatar. 2020.
- 57 Braddick F, Carral V, Jenkins R, Jane-Llopis E. *Child and adolescent mental health in Europe: infrastructures, policy and programmes*. European Communities, 2009.
- 58 World Health Organization. *Mental health atlas*, 2017. World Health Organization, 2017.
- 59 Supreme Council of Health. *Qatar National Mental Health Strategy: changing minds, changing lives 2013–2018*. Supreme Council of Health, Qatar. 2013.
- 60 World Health Organization. *Child and adolescent mental health policies and plans*. World Health Organization (Mental Health Policy and Service Guidance Package), 2005.
- 61 World Health Organization. *Caring for children and adolescents with mental disorders: setting WHO directions*. World Health Organization, 2003.
- 62 World Health Organization. *The mental health context*. World Health Organization (Mental Health Policy and Service Guidance Package), 2003.
- 63 United Nations. *Mental health matters: social inclusion of youth with mental health conditions*. ST/ESA/352, 2014. United Nations. Available from: <https://www.refworld.org/docid/53f1be4c4.html>
- 64 Rthod S, Pinninti N, Irfan M, et al. Mental health service provision in low- and middle-income countries. *Health Serv Insights* 2017;10:1-7. doi:10.1177/1178632917694350
- 65 Sartorius N. Stigma: what can psychiatrists do about it? *Lancet* 1998;352(9133):1058-9. doi:10.1016/S0140-6736(98)08008-8
- 66 Day C. Childrens' and young people s' involvement and participation in mental health care. *Child Adolesc Mental Health* 2008;13:2-8. doi:10.1111/j.1475-3588.2007.00462.x
- 67 Young Minds. *Report on children, young people, and family engagement for the children and young people's mental health and wellbeing taskforce*. Young Minds, UK. 2014.
- 68 Care Quality Commission. *Review of children and young people's mental health services*. Phase one report. 2017. Care Quality Commission, UK. Available from: https://www.cqc.org.uk/sites/default/files/20171103_cypmhphase1_report.pdf
- 69 Sharkey T. Mental health strategy and impact evaluation in Qatar. *BJ Psych Int* 2017;14(1):18-21.
- 70 Qatar Ministry of Transport and Communication. (2017). Qatar's Digital Natives: A deeper look into the every days use if technology by youth in Qatar. QMOTC. file:///C:/Users/salharahsheh/Desktop/digital%20addiction%20in%20MENA%20region/Literature/digital%20technology-literature/qatars_digital_natives_en.pdf.
- 71 OECD. *Children & young people's mental health in the digital age shaping the future*. OECD Publishing, Paris. 2018.
- 72 Children's Commissioner for England. Digital 5 a day. 2017. Available from: <https://www.childrenscommissioner.gov.uk/2017/08/06/digital-5-a-day>
- 73 Blum-Ross A, Livingstone S. *Families and screen time: current advice and emerging research*. LSE Media Policy Brief 17. London School of Economics, 2016.
- 74 Unutzer J, Choi Y, Cook IA, Oishi SA. Web-based data management system to improve care for depression in a multicenter clinical trial. *Psychiatr Serv* 2002;53:671-73, 678. doi:10.1176/ps.53.6.671
- 75 World Health Organization. *Mental health: facing the challenges, building solutions: report from the WHO European Ministerial Conference*. World Health Organization, 2005.
- 76 World Health Organization and World Organization of Family Doctors (Wonca). *Integrating mental health into primary care: a global perspective*. p. 16, 2008. World Health Organization. Available from: https://www.who.int/mental_health/policy/services/integratingmhintopriamarycare/en/
- 77 Ministry of Health, Jordan. *The national mental health policy and plan of the Hashemite Kingdom of Jordan*. 2011. Ministry of Health, Jordan, Amman. Available from: <https://www.mhinnovation.net/sites/default/files/downloads/innovation/reports/National-Mental-Health-Policy-Jordan.pdf>