

Autism at a Glance in ASEAN



Under the Autism Mapping Project
in the ASEAN Region

Part I
Summary



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PREFACE

In 2016 the ASEAN Secretariat initiated the idea to undertake the “Autism Mapping Project in the ASEAN Region” to understand the situation of autism and to take stock of what had been done so far for persons with autism in the region. It estimated that autism affects one percent of the world’s population. According to the World Health Organization, one in 160 children has an autism spectrum disorder. About 6 million persons with autism live in Southeast Asia. It is a significant number that affects the development of all ASEAN Member States (AMS) in the region.



However, the prevalence of autism in the ASEAN region is unknown since autism is a hidden disability that is difficult to detect because autism is a neuro-developmental disorder which is a spectrum, there is no one type of symptoms and it can affect people differently. As a consequence, many persons with autism are neglected and not included in governmental and non-governmental programs and services designed for persons with disabilities. Their exclusion from the development process also obstruct the creation of laws and policies for the promotion and protection of the rights of persons with autism.

The issues concerning persons with autism were propelled mainly by persons with autism themselves, their families and other stakeholders. These are evidenced by the conduct of the annual commemoration of Autism Day on the 2nd of April of every year and the conduct of autism sport events and other community-based activities to raise awareness and to construct unitary collaboration on strengthening persons with autism among AMS.

I wish to take this opportunity to express my sincere thanks to the ASEAN Secretariat for assigning the Asia-Pacific Development Center on Disability (APCD) to be the implementing agency for the “Autism Mapping Project in the ASEAN Region.” The project is intended to contribute towards data collection, policy recommendation and awareness raising which are critical to building evidence-based interventions that can prevent and remove barriers faced by persons with autism.

This document “Autism at a Glance in ASEAN” is one of the major outputs of the project. It highlights the country profiles on autism especially the present scenario of AMS. It is proof of

the strategic partnership between AMS through the ASEAN Senior Officials Meeting on Social Welfare and Development (SOMSWD) and the ASEAN Secretariat and together with APCD.

I hope that it will contribute to data collection on persons with autism in the ASEAN region. It may also lead to improvement in their wellbeing and quality of life as well as of their parents and caregivers. Most significantly, it may improve the understanding of society as a whole and contribute to the empowerment of persons with autism in the inclusive society.



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INTRODUCTION

Autism refers to a range of conditions characterised by some degree of impaired social behaviour, communication and language, and a narrow range of interests and activities that are both unique to the individual and carried out repetitively. Autism begins in childhood and tends to persist into adolescence and adulthood. In most cases the conditions are apparent during the first 5 years of life (World Health Organisation, 2020). In current, the prevalence estimation of persons with autism globally is approximately at 1% of the population worldwide (CDC, 2020).

The United Nations (UN) commemorated World Autism Awareness Day on April 2, which is also commemorated globally on this date. World Autism Awareness Day was established by the U.N. General Assembly (A/RES/62/139) on Dec. 18, 2007. Members of the U.N. General Assembly expressed deep concern regarding the prevalence rates of autism throughout the world and the need to address the long-term outcomes for children, families and communities. The resolution declared that starting April 2, 2008, and on this date each year, representatives of the U.N. and nongovernmental organizations (NGOs) would raise awareness about autism throughout the world as well as address the fundamental human rights of persons with autism (U.N. General Assembly, 2007).

In crafting Resolution 62/139, members of the U.N. General Assembly acknowledged the Convention on the Rights of the Child (U.N. Human Rights, 1989) and the Convention on the Rights of Persons with Disabilities (U.N. Enable, 2006), which guarantee rights and freedoms to; (i) Live in dignity, (ii) Live a full life in the community as other children do, and (iii) be self-reliant economically in adulthood (Gary & Neal, 2015).

Currently, lack of data on persons with autism, particularly in developing countries, collection of research data and statistics to support the formulation of evidence-based policies is key to all aspects of the implementation of disability-inclusive policies and programmes in line with the Convention on the Rights of Persons with Disabilities. Reliability of data and statistics is essential for the formulation of policies, and to monitor progress and assess the effectiveness of measures to implement the Convention, and to advance disability inclusive development and realize all internationally agreed development goals for persons with autism. For better policy making, a government requires more in-depth information

from every sector that provided services to persons with autism, which becomes possible with big data. Analysing gathered data can improve the autism related policies and allow governments to boost their services faster and in a sustainable manner.

Autism at the Glance in ASEAN collates the available data on autism in the region, with a particular emphasis on the number, education, employment, health and social welfare programme of persons with autism.

Part 1: Autism at a Glance in ASEAN. Chapter 1, explained the methodology used in this project, how data was collected and analysed from all ASEAN Member States. Chapter 2 explores the ASEAN country national law and international commitments. Chapter 3 elucidate facts and figures about the number of persons with autism, education, health and employment. Chapter 4 present the programs and services for persons with autism in early intervention, health, education, employment, and social services provided by ASEAN Members States. Finally, Chapter 5 highlights the challenges faced by ASEAN members to promote empowerment for persons with autism.

In Part 2: Country Profiles, provide the latest country's report on demographic, information of persons with autism, programme and services, challenges and country strategic plan by governments to enhance the quality of life for persons with autism.

METHODOLOGY

Introduction

Autism at a Glance in ASEAN was based on the Country Profile on Autism prepared by all ASEAN Member States (AMS). The template of the Country Profile on Autism was agreed at the Workshop on The Development of Methodology for Mapping of Country Profile on Autism. This workshop was under the ASEAN Secretariat's Project "Autism Mapping Project in the ASEAN Region". It was held on 23-25 July 2018 at the Asia-Pacific Development Center on Disability (APCD) in Bangkok, Thailand.

Responsible agencies

In each AMS, there are several stakeholders, both government and non-government organizations, involved in formulating the Country Profile on Autism. The Senior Officials Meeting on Social Welfare and Development (SOMSWD) and SOMSWD focal points are the key mechanism of the ASEAN Secretariat in coordinating the government organizations in formulating the Country Profile on Autism. The main ministries involved in formulating the Country Profile on Autism are shown in Table 1.1.

Table 1.1: Main ministries involved in formulating the Country Profile on Autism

Country	Main Ministry
Brunei Darussalam	Ministry of Culture, Youth and Sports
Cambodia	Ministry of Social Affairs, Veterans and Youth Rehabilitation
Indonesia	Ministry of Social Affairs
Lao PDR	Ministry of Labour and Social Welfare
Malaysia	Ministry of Women, Family and Community Development
Myanmar	Ministry of Social Welfare, Relief and Resettlement
Philippines	National Council on Disability Affairs
Singapore	Ministry of Social and Family Development
Thailand	Ministry of Social Development and Human Security
Vietnam	Ministry of Labour, Invalids and Social Affairs

Data Collection at National Level

Data collection in AMS was conducted with their best efforts. The data consists of primary and secondary data from the relevant ministries and NGOs through various activities such as workshops, interviews, and reports. However, the data presented in the country's report does not represent the whole actual situation of persons with autism due to the limited time and resources. Thus, the data contained in this document is for general information and referral purposes only.

Data Presentation and Analysis

Data presentation and analysis forms an integral part of the Autism at a Glance in ASEAN. Presentation of data is necessary to make use of collected data which is considered to be raw data in the form of tables, figures, and text. While data analysis helps in the interpretation of data by using the content analysis method.

2.1 Introduction

ASEAN countries' national laws in protecting the rights of persons with disabilities are the first sources of statutory obligations to guarantee the fundamental rights of persons with autism and to provide them with services and support. However, the needs of persons with autism should be acknowledged. The inclusion of persons with autism among the disability categories established by law helps to reinforce their rights in the domestic legal order.

Most ASEAN countries have included persons with autism as disabled persons recognized by law. Some ASEAN countries have developed specific national autism plans and strategies. Some countries have adopted ad-hoc measures in favour of persons with autism in sectoral laws.

However, when these laws are combined with national autism plans, the domestic legal framework for the protection of persons with autism is complete and more extensive to meet the needs of a wider range of persons and produce positive effects at the domestic level in terms of their inclusion in society. These laws and policies provide for the care and protection of persons with autism and ensure their access to education, health, shelter, security and other human rights and are generally in conformity with the principles and articles of the international commitments.

2.2 International Commitments

International commitments, among others, influence and shape the policy landscape in ASEAN on persons with disabilities, including persons with autism.

United Nations Convention on the Rights of Persons with Disabilities (CRPD): The Convention is intended as a human rights instrument with an explicit, social development dimension. It adopts a broad categorization of persons with disabilities and reaffirms that all persons with

all types of disabilities must enjoy all human rights and fundamental freedoms. It clarifies and qualifies how all categories of rights apply to persons with disabilities and identifies areas where adaptations have to be made for persons with disabilities to effectively exercise their rights and areas where their rights have been violated, and where protection of rights must be reinforced.

Sustainable Development Goal (SDG): For the 2030 Agenda for Sustainable Development, the international community reaffirmed its strong commitment to inclusive, accessible and sustainable development, and pledged that no one would be left behind. In this context, the participation of persons with autism as both agents and beneficiaries is essential for the realization of the Sustainable Development Goals (SDGs). Five of the Goals contain an explicit reference to disability, and another six are indirectly linked to disability-related issues. Included in the Goals is the disaggregation of data by disability status, where relevant. In addition, persons with disabilities are one of the 12 major groups recognized by the United Nations to support the implementation of the 2030 Agenda.

Convention on the Rights of the Child: The Convention has 54 articles that cover all aspects of a child's life and set out the civil, political, economic, social and cultural rights that all children everywhere are entitled to. It also explains how adults and governments must work together to make sure all children can enjoy all their rights.

Incheon Strategy to 'Make the Right Real' for Persons with Disabilities in Asia and the Pacific: Incheon Strategy was established by United Nations ESCAP on November 2, 2012. It provides the Asian and Pacific region with the first set of regionally agreed disability-inclusive development goals comprising 10 goals, 27 targets and 62 indicators.

Beijing Declaration and Platform for Action: The Beijing Declaration and Action Plan reaffirms the key principles and policy direction contained in the Incheon Strategy, and place special emphasis on inclusive and shared development towards the goal of leaving no one behind.

ASEAN Enabling Master Plan 2025: Mainstreaming the Rights of Persons with Disabilities: The overall goal of the Enabling Masterplan is to contribute to the enhancement of the implementation of the CRPD at regional level, building an inclusive community where independence, freedom of choice, and full and effective participation of persons with disabilities in all areas of life are realised and sustained. The Enabling Masterplan aims to achieve equality and high quality of life for persons with disabilities, their family members, personal assistants, and caregivers, where applicable.

2.3 ASEAN Countries Law and Policy Related to Persons with Autism

Lists of laws and policies related to persons with autism in ASEAN Member States are indicated below.

Brunei Darussalam

Table 2.1: Law and policy related to autism in Brunei Darussalam

▪ Old Age and Disability Act	▪ Islamic Family Law Order
▪ Civic Law	▪ Legitimacy Order
▪ Syariah Penal Code	▪ Employment Order
▪ Building Control Order	▪ Mental Health Order
▪ Education Act	▪ Children and Young Person Order
▪ Emergency Regulation Act	▪ Women and Girls Protection Act
▪ Compulsory Education Act	▪ Criminal Procedure Code
▪ Education Regulation	▪ Women and Girls Protection Act (Place of Safety Rules)
▪ Compulsory Islamic Education	▪ Chinese Marriages Act
▪ Workmen Compensation Act	
▪ Employment Agencies Order	

Cambodia

Table 2.2: Law and policy related to autism in Cambodia

<ul style="list-style-type: none"> ▪ Law on the Protection and the Promotion of the Rights of Persons with Disabilities 	<ul style="list-style-type: none"> ▪ National Disability Strategy Plan (2019-2023)
<ul style="list-style-type: none"> ▪ Strategy plan of Ministry of Social Affairs, Veterans and Youth Rehabilitation (2019-2023) (3rd priority and Chapter) 	<ul style="list-style-type: none"> ▪ Program 1 and Sub-program 1.3 on the promotion of welfare for persons with disabilities)
<ul style="list-style-type: none"> ▪ Policy on Education for Children with disabilities (March 2008) 	<ul style="list-style-type: none"> ▪ National Social Protection Policy Framework (2016-2025)
<ul style="list-style-type: none"> ▪ Inter-ministerial Prakas N0 248 on technical physical infrastructures standard of accessibilities for persons with disabilities 	<ul style="list-style-type: none"> ▪ National Community-Based Rehabilitation Guideline
<ul style="list-style-type: none"> ▪ Inter-ministerial Circular N0005 on Reasonable Accommodation on Employment of Persons with Disabilities 	<ul style="list-style-type: none"> ▪ Prakas N0 959 on Cambodia Disabilities Inspection (Procedure of Disability Registration in Workplace)
<ul style="list-style-type: none"> ▪ The National Employment Policy (NEP2015-2025) 	

Indonesia

Table 2.3: Law and policy related to autism in Indonesia

<ul style="list-style-type: none"> ▪ Republic of Indonesia Law Number 19 Year 2011 	<ul style="list-style-type: none"> ▪ Republic of Indonesia Law Number 8 Year 2016
<ul style="list-style-type: none"> ▪ Republic of Indonesia Law Number 20 Year 2003 	<ul style="list-style-type: none"> ▪ Republic of Indonesia Law Number 18 Year 2014
<ul style="list-style-type: none"> ▪ Government Regulation Number 27 Year 2019 	<ul style="list-style-type: none"> ▪ Government Regulation Number 52 Year 2019
<ul style="list-style-type: none"> ▪ Government Regulation Number 2 Year 2018 	<ul style="list-style-type: none"> ▪ Government Regulation Number 32 Year 2008
<ul style="list-style-type: none"> ▪ Regulation of the Minister of National Education Number 70 of 2009 	<ul style="list-style-type: none"> ▪ Regulation of the Minister of Manpower Number 8 of 2017
<ul style="list-style-type: none"> ▪ Regulation of the Minister of Social Affairs Regulation Number 20 of 2015 	<ul style="list-style-type: none"> ▪ Regulation of the Minister of Social Affairs Regulation Number 9 of 2018
<ul style="list-style-type: none"> ▪ Regulation of the Minister of Social Affairs Regulation on The Family Hope Program 	

Lao PDR

Table 2.4: Law and policy related to autism in Lao PDR

<ul style="list-style-type: none"> ▪ Lao Constitution No.63 date 8 December 2015 ▪ Law on Education No. 62 date 16 July 2015 (promote inclusive education system) ▪ Law on Labour (Amended) No.43 date 24 December 2013 (promotion of vocational training and employment) ▪ Law on Health treatment (Amended) No.58 date 24 December 2014 (promote treatment and rehabilitation) ▪ Law on Land Transportation (Amended) No.24 date 12 December 2012 (promote accessibility) ▪ Decree on Persons with Disabilities No. 137/Gov, dated 18 April 2014. ▪ Law of Persons with Disabilities (Adapted by President of Lao PDR in May 2019). 	<ul style="list-style-type: none"> ▪ Law on Resistance and Prevent Violence against Women and Child No.56 date 23 December 2014 ▪ National policy and strategy plan on inclusive education from 2010-2015 ▪ Law on Hygiene, Disease Prevention and Health Promotion (Amended) No.8 date 21 December 2011 (promotion nutrition) ▪ Law on Construction No.5 date 26 November 2009 (promote accessibility) ▪ Decree on the Organization and Operation of National Committee for Disabled People and the Elderly No. 232/PM, dated 6 September 2013. ▪ National Policy for Persons with Disabilities (final draft submitted to NCDE Board in 2017 and waiting for approval)
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Malaysia

Table 2.5: Law and policy related to autism in Malaysia

<ul style="list-style-type: none"> ▪ Rules of the Rehabilitation Centre for Mentally Retarded 1977 	<ul style="list-style-type: none"> ▪ Persons with Disabilities Act 2008
<ul style="list-style-type: none"> ▪ Rules for Sheltered Workshops 1979 	<ul style="list-style-type: none"> ▪ Persons with Disabilities (Registration and Issuance Kad OKU) Regulations 2010
<ul style="list-style-type: none"> ▪ Uniform Building by law 	
<ul style="list-style-type: none"> ▪ 1% Employment of PWDs in the Public Sector Policy 	<ul style="list-style-type: none"> ▪ National Family Policy Malaysia
<ul style="list-style-type: none"> ▪ Education Act 1996 	<ul style="list-style-type: none"> ▪ Education (Special Education) Regulations 2013
<ul style="list-style-type: none"> ▪ Child Act 2001 	<ul style="list-style-type: none"> ▪ Malaysia Education Development Plan 2013-2025
<ul style="list-style-type: none"> ▪ Eleventh Malaysia Plan (2016-2020) - Chapter 3, Strategy B4 & B6 	
<ul style="list-style-type: none"> ▪ Zero Reject Policy 	<ul style="list-style-type: none"> ▪ Malaysian Standard (MS1184:2014) ▪ Policy and Persons with Disabilities Plan of Action 2016-2022

Myanmar

Table 2.6: Law and policy related to autism in Myanmar

<ul style="list-style-type: none"> ▪ Rights of the Persons with Disabilities Law in 2015 	<ul style="list-style-type: none"> ▪ Law for Elderly
<ul style="list-style-type: none"> ▪ Child Law (1993) 	<ul style="list-style-type: none"> ▪ Child Right Law (2019)
<ul style="list-style-type: none"> ▪ Right of Persons with Disabilities Law (2015) 	<ul style="list-style-type: none"> ▪ Myanmar National Strategy for Development of Persons with Disabilities (2016-2025)
<ul style="list-style-type: none"> ▪ Early Childhood Care and Development Policy (ECCD) Policy 	

Philippines

Table 2.7: Law and policy related to autism in Philippines

▪ Magna Carta for Persons with Disabilities	▪ Republic Act Number 10070, dated 27/07/2009
▪ Republic Act Number 10336, dated 23/07/2012	▪ Republic Act Number 10524, dated 23/07/2009
▪ Anti-Bullying Act	

Singapore

Table 2.8: Law and policy related to autism in Singapore

▪ 3 rd Enabling Masterplan

Thailand

Table 2.9: Law and policy related to autism in Thailand

▪ Persons with Disabilities Empowerment Act B.E. 2550 (2007) and amended (Vol.2) B.E. 2556 (2013)	▪ Education Management for Persons with Disabilities Act B.E. 2551 (2008)
▪ 5 th National Plan on Empowerment of Persons with Disabilities (2017-2021)	▪ Royal Decree (No. 499) 2010
▪ Ministerial Regulation No. 281 (B.E. 2554)	▪ 12 th National Economic and Social Development Plan 2017-2021 (B.E. 2560-2564)

Vietnam

Table 2.10: Law and policy related to autism in Vietnam

<ul style="list-style-type: none"> ▪ Law of PWDs No. 51/2010/QH12 dated 17/6/2010 	<ul style="list-style-type: none"> ▪ Decree No. 28/2012/NĐ-CP dated 10/4/2012
<ul style="list-style-type: none"> ▪ Decree No. 103/2017/NĐ-CP dated 12/9/2017 	<ul style="list-style-type: none"> ▪ Decree No. 136/2913. NĐ-CP
<ul style="list-style-type: none"> ▪ Decree No. 56/2017/NĐ-CP dated 9/5/2017 	<ul style="list-style-type: none"> ▪ Law of Children
<ul style="list-style-type: none"> ▪ Decision No. 1215/QĐ-TTg dated 22/7/2011 	<ul style="list-style-type: none"> ▪ Decision No. 1019/QĐ-TTg dated 5/8/2012
<ul style="list-style-type: none"> ▪ Decision No. 1364/QĐ-LĐTBXH dated 02/10/2012 	<ul style="list-style-type: none"> ▪ Decision No. 647/2013/QĐ-TTg dated 26/04/2013
<ul style="list-style-type: none"> ▪ Decision No. 1717/QĐ-TTg dated 06/10/2015 	<ul style="list-style-type: none"> ▪ Decision No. 1100/QĐ-TTg dated 21/6/2016
<ul style="list-style-type: none"> ▪ Circular No. 01/2019/TT-BLĐTBXH dated 2/1/2019 	<ul style="list-style-type: none"> ▪ Decision No. 1019/QĐ-TTg dated 5/8/2012
<ul style="list-style-type: none"> ▪ Joint Circular No. 42/2013/TTLT-BGDĐT-BLĐTBXH-BTC dated 31/12/2013 	<ul style="list-style-type: none"> ▪ Circular No. 01/2015/TT-BLĐTBXH dated 6/1/2015

FACTS AND FIGURES: PERSONS WITH AUTISM IN ASEAN

Chapter

3

It is estimated that one percent of the global population has autism which translates to an estimate of 6 million persons with autism in ASEAN. The data from the country profile on autism of all ASEAN Member States, however, cannot validate this estimate. Most ASEAN Member States with their best efforts could provide limited data on persons with autism due to the fact that autism is difficult to recognize and it is mostly classified under other categories of hidden disabilities. However, they are aware of these challenges and need more time and support for the development of laws and policies for the promotion and protection of the rights of persons with autism in the future.

3.1 Brunei Darussalam

The total population of Brunei Darussalam in 2018 was 442,400 people approximately whereby 233,400 people are males and 209,000 people are females. In 2019, there were 7,038 people or 1.6% of the total population who are persons with disabilities. There is no specific data on autism nor in areas pertaining to diagnosis and impairment on the national scale. However, persons with autism are not excluded from any of the services and facilities provided in the country.

Number of Persons with Autism

Child Development Centre at RIPAS Hospital in Bandar Seri Begawan and the Paediatrics Department in SSB Hospital in Kuala Belait reported that there were 1,858 children and youth with autism in 2019. As many as 1,329 males or 72% and 529 females or 28% were diagnosed with autism. The ratio of male to female is 2.6 to 1 as shown in Table 3.1.

Table 3.1: Number of persons with autism in Brunei Darussalam (2019)

Male	Female	Ratio of Male to Female
1,329 (72%)	529 (28%)	2.6 to 1

Note: Statistics do not include those children seen in the SSB Hospital, Kuala Belait-data is up to date as at 31st December 2019, being collected from all available records since 1999.

Health Care

The Child Development Center at RIPAS Hospital in Bandar Seri Begawan and the Pediatrics Department in SSB Hospital in Kuala Belait collected data on children with disabilities referred for concerns about their development, as well as those who have established disabling conditions. More female children were diagnosed with autism compared to male children in 2019 as shown in Table 3.2.

Table 3.2: Number of children with autism in Brunei (2019)

Male	Female	Total	Ratio of Male to Female
1329 (72%)	529 (28%)	1,858	2.6 to 1

Note: Statistics do not include those children seen in the SSB Hospital, Kuala Belait-data is up to date as at 31st December 2019, being collected from all available records since 1999.

Education

The Special Education Unit under Ministry of Education reports that there are 418 autism students in public schools and 23 students in private schools in the year 2019 as shown in Table 3.3 and Figure 3.1.

Table 3.3: Number of students with autism in public and private schools (primary & secondary schools) in Brunei Darussalam (2019)

	Pre-school	Primary school (year 1 to year 6)	Secondary School	Total
Public	55	238	125	418
Private	12	9	2	23

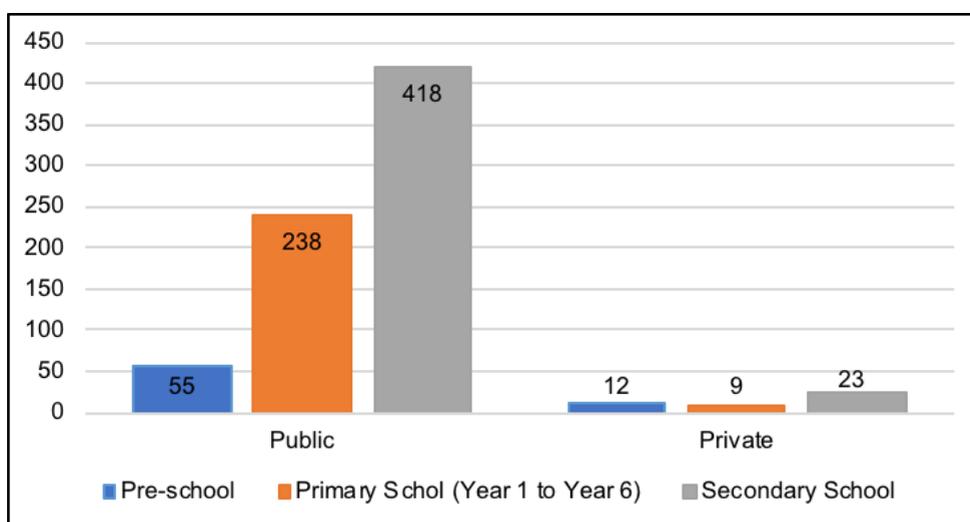


Figure 3.1: Number of students with autism in Brunei Darussalam according to the category in public and private schools in 2019

Figure 3.2 shows the enrolment of autistic students in religious schools including those from primary and secondary public schools and non-government organizations (NGOs) such as SMARTER, LEARNING LADDER SCHOOL and others. There are 34 students in Belait District, 3 students in Temburong District, 35 students in Tutong District and 188 students in Brunei Muara District. More male students are afflicted with autism compared to female students.

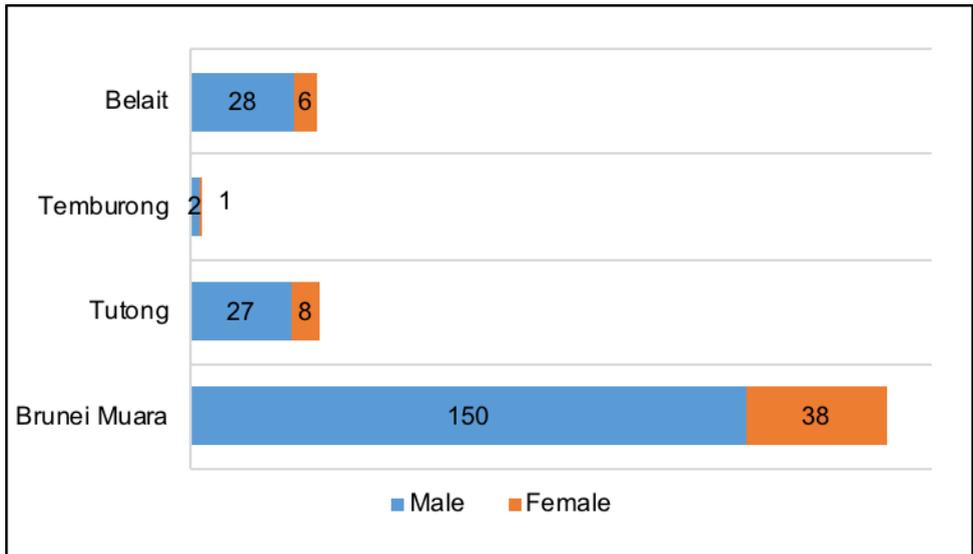


Figure 3.2: Number of students with autism in religious schools (by districts) in Brunei Darussalam (2019)

Employment

In Brunei, persons with autism are categorized as one kind of disability. Currently, there is no comprehensive data on the employment of persons with disabilities. However, in 2019, the Government through the Ministry of Culture, Youth and Sports conducted a profiling survey on employment of persons with disabilities. Based on the feedback received from several government agencies and government-linked companies, it has so far shown that a total of 117 persons with disabilities were employed in the public and private sectors.

3.2 Cambodia

Autism in Cambodia is under category autism and intellectual disability. The Royal Government of Cambodia has prioritized disability and is taking all measures to protect and promote the rights of persons with disabilities. Each year Cambodia produces about 28,000 assistive devices with a high-quality standard of ISO 9001:2015 free of charge to 322,421 persons with disabilities including 145,204 females with disabilities. In 2018, 1,851 hearing aids were given to 1,701 persons with hearing impairments.

Number of Persons with Autism

There were 941 males and 372 females with autism reported from the total population of 1,313 people in 18 provinces out of 25 provinces in Cambodia. The number of males with autism is greater compared to females in Cambodia (Table 3.4).

Table 3.4: Number of persons with autism in Cambodia (2019)

Male	Female	Ratio of Male to Female
941 (72%)	372 (28%)	2.6 to 1

Health Care

In Cambodia, 70 children with autism have access to health care services monthly.

Education

The total number of students with autism in special education in Cambodia is 881 males and 602 females from a total of 1,483 people as shown in Table 3.5.

Employment

According to statistics on employment of persons with disabilities in 2017, there were 3,917 persons with disabilities that have been recruited in public sectors and 2,962 persons with disabilities are working in 63 private sectors. The total number of persons with disabilities working in both private and public sectors is 5,699. It is estimated that less than 100 persons with autism are unemployed. Meanwhile, youths with autism are permitted to work in offices, where their work is related to simple documentation, cleaning and preparing snacks for guests.

Table 3.5: Number of students with autism in Cambodia, 2018-2019

Special Education 2018-2019 (Including children with autism)														
No.	Capital/ Province	School Name	Student		Teacher in contract	Total Class		The number of teachers				Management by		
			Female	Total		Total	Teacher in contract	NGO's Teacher		State's Teacher		GOV	NGO	Others
								F	Total	F	Total			
1.	Phnom Penh, Trea Village Sangkat Steng/Meanchey Khan Meanchey	1	PSE	43	19	2		6	6	9	8		√	
2.	Battambang and Kampong Chhnang	2	Soksan Center	68	37	4		12	5				√	
3.	Kandal	1	Lavala	86	37	7		2	1	11	6		√	
4.	Battambang and Kampong Chhnang	2	Metakaruna	260	135	6		69	39				√	
5.	Phnom Penh	3	KPF	140	55	7		6	5	14	8	√		
6.	Poursat	1	SCI	11	8	1				2	1			
7.	Kandal	1	HHC	160	70	16		5	4	14	5	√		
8.	Kampot	1	EPIC/ARDF	38	11	1		8	5				√	
9.	Jesuit Service locat- ed in Phnom Penh	1	JSC	11	7	2		2	1	2	2		√	
10.	Phnom Penh, Kam- pong Chhnang, Siem Reap, Kampong Spuer	17	Rabbit School	666	223	49		18	14	12	8	√		
Grand Total				1483	602	95		26	19	128	80	64	38	

3.3 Indonesia

The total population in Indonesia rapidly increased from 255,461,700 people in 2015 to 268,074,600 people in 2018. The percentage of males is 50.28% and the percentage of females is 49.72%, the growth rate is 1.34%. The life expectancy rate is 71.1 years.

Number of Persons with Autism

The total number of persons with disabilities is 161,541 people, of which 2,729 are persons with autism in 2019. In every 59 persons with disabilities, there is 1 person with autism.

Persons with Disabilities by Age

There are six (6) age groups from 0 to over 50 (Figure 3.3). Of the total number of persons with disabilities, 27.2% are in the age group 6 to 18 years.

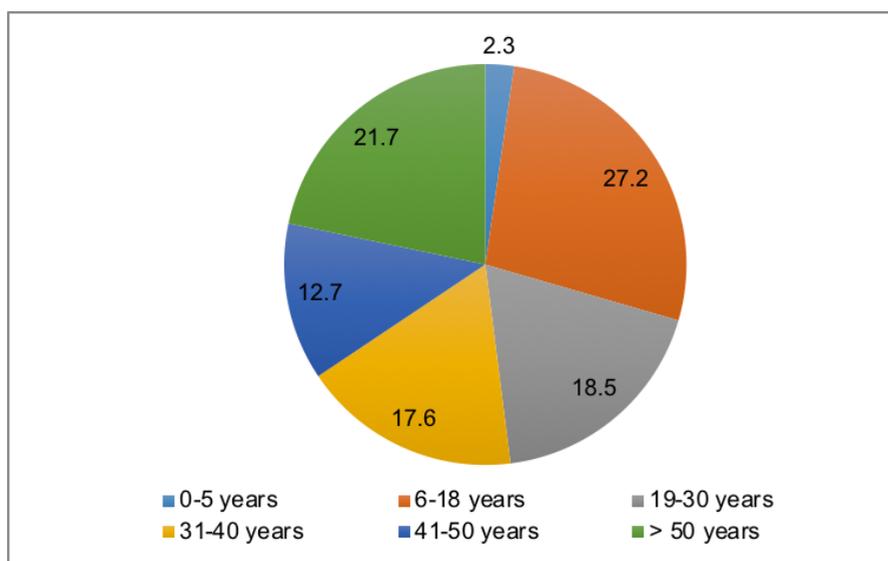


Figure 3.3: Percentage of persons with disabilities based on age groups in Indonesia (2019)

Health Care

There are four (4) services offered in health care namely, promotion methods, prevention methods, curative methods and rehabilitation efforts. Autism spectrum disorders require integrated treatment, including medical therapy for mentosa, functional therapy, and biomedical therapy.

Education

There are 1,438,788 students with disabilities at elementary and high schools and 3,663 students with autism at special elementary schools and special high schools in 2019 (Figure 3.4).

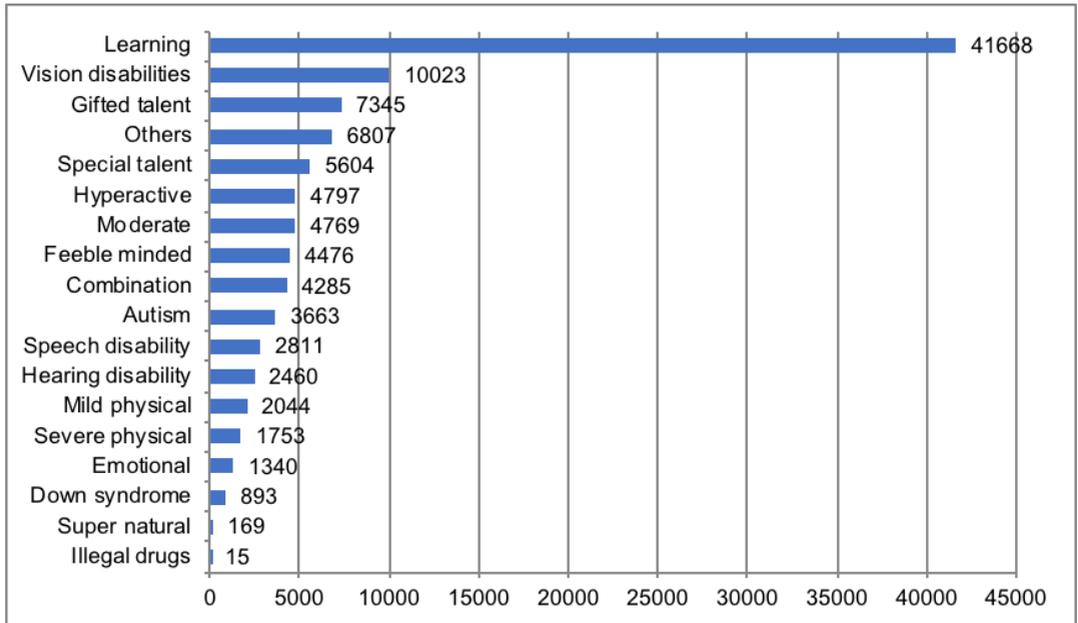


Figure 3.4: Type of students with disabilities in school (Indonesia), 2019

Employment

There are 10,333,806 males and 12,229,586 females from the total disability population which is 22,563,392 people. The highest recorded types of disabilities are vision impairment and the lowest number of disabilities is limb impairment. In 2018, there were more female workforce with disabilities than males with disabilities (Table 3.6).

Table 3.6: Type of persons with disabilities workforce in Indonesia (2018)

No	Types of Disabilities	Male	Female	Total
1.	Vision disability	3,741,649	3,792,611	7,534,260
2.	Hearing disability	653,713	574,200	1,227,913
3.	Walking disability	689,571	965,704	1,655,275
4.	Limb disability	127,890	120,458	248,348
5.	Speech disability	151,391	126,674	278,065
6.	Others	641,202	737,709	1,378,911
7.	Double disabilities	2,130,630	2,460,721	4,591,361
8.	Triple disabilities	903,137	1,291,340	2,194,477
9.	More than three disabilities	1,294,623	2,160,169	3,454,792
Total		10,333,806	12,229,586	22,563,392

3.4 Lao PDR

Introduction

Based on the national census in 2015, Lao PDR has a total of 160,881 persons with disabilities covering 2.8% of the total population aged 5 years and above (80,766 are males and 80,115 are female). Persons with disabilities aged 60 years and above cover 18.4% of the total persons with disabilities. The 2015 census also indicated that persons with visual disability cover 1.3%, persons with mobility disability 1.3%, persons with hearing disability 1.2%, persons with memory disability 1.2%, persons with self-care disability 1.1% and persons with speech or communication disability 0.9%.

Number of Persons with Autism

Currently, Lao PDR has no specific data on the number of persons with autism, however, the number of persons with autism is included in a total of 160,881 persons with disabilities.

Health Care

The Ministry of Labor and Social Welfare has established several initiatives under health care services as follows:

To promote the development of policies on prevention, treatment for victims or from any impact of unexploded ordinances, for physical and mental rehabilitation especially for women, children and elderly people with disabilities without discrimination;

To encourage and promote families, society to assist and take care of persons with disabilities;

To appropriately provide prostheses, various assistive devices for support, lifting and hearing for persons with disabilities;

To create favourable conditions for persons with disabilities to have broad access to medical information and data for their treatment;

To grant appropriate reduction or exemption of fees for care, rehabilitation, treatment, and other fees;

To attentively prevent disability before birth, to assist and provide early.

Education

Currently, the total number of students with disabilities at primary and secondary school in Lao PDR is approximately 6,379 students with 2,692 being female students. From this number, 98 students are identified as persons with autism.

Employment

The disability law and draft National Policy on Persons with Disabilities promotes the full participation of persons with disabilities in employment but Lao PDR has not recorded any cases on people with autism employed at the moment.

3.5 Malaysia

Introduction

In Malaysia, Persons with Disabilities Act 2008 [Act 685] was enacted in 2008 with the objectives of, among others, to uphold the rights of persons with disabilities (PWDs) and their access to public facilities, services and buildings, public transportation, education, employment, information and communication technology (ICT), health as well as habilitation and rehabilitation on an equal basis.

Number of Persons with Autism

In 2018, the number of registered autistic individuals in Malaysia was at 21,287 people. The prevalence of persons with autism in Malaysia is approximately 1.6 in 1,000. In 2015, there were 305 cases compared to 473 cases in 2016, while 515 cases were reported in 2017.

Age

Registered autism cases are increasing every year as there were only 210 cases in 2016 but the figure increased to 1,392 cases in 2018 based on Table 3.7. Many autism cases were reported in the age group of 7 to 12 years old. The total reported autism cases in 2018 was 2,952 cases.

Table 3.7: Number of registered persons with autism in the 2016 and 2017 by age (Malaysia)

Age Range	2016	2017	2018
0-6	210	715	1,392
7-12	1,872	1,901	1,400
13-18	205	199	160
Total	2,287	2,815	2,952

Data from the Ministry of Health (MOH) obtained for 2015-2017 however showed that the number of new cases of children aged 0 to 18 years old who were diagnosed and received treatments for persons with autism in public health institutions has been on the rise.

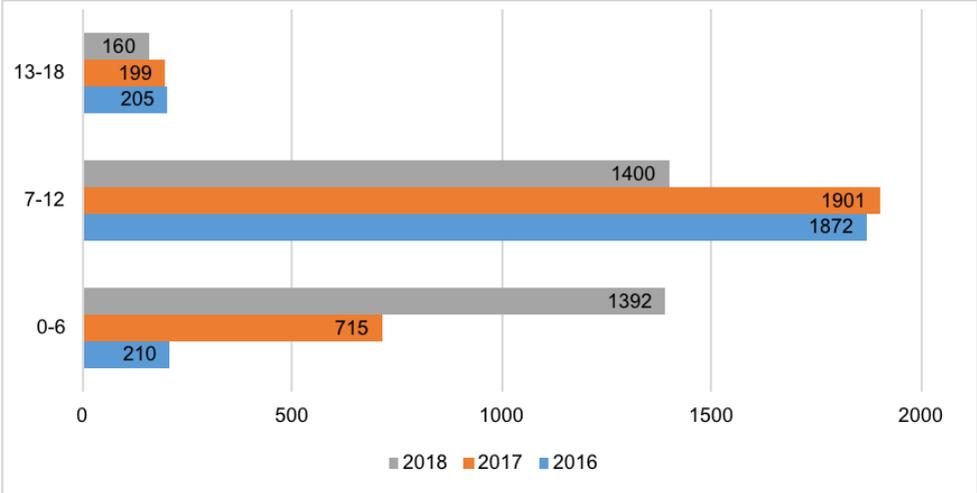


Figure 3.5: Reported autism cases in Malaysia from 2016 to 2018

Health Care

The cases diagnosed and received treatment for persons with autism increased rapidly from 305 cases in 2015 to 515 cases in 2017 as shown in Table 3.8. More cases were diagnosed in the age group of 3 to 4 years old for each year. A study done by the Ministry of Health (MOH) in the year 2005 showed that the prevalence rate of persons with autism among toddlers (18 months to 3 years) was 1.6 per 1,000 children. For the year 2017, a total of 451,158 children aged 18 months were screened for persons with autism and 1,551 (0.34%) were suspected to be persons with autism, while 622 (0.27%) from 230,457 screened children aged 3 years old were suspected to be persons with autism. These children were then given early intervention and referred for confirmation of diagnoses. Data collected and monitored at the national level shows an upward trend in the number of children detected with ASD yearly. The increase of trained health personnel doing prompt early screening as well as the increase in awareness among parents contributed to more cases of detection of early signs of autism in younger children.

Table 3.8: Cases of children aged 0-18 years old who were diagnosed and received treatments for autism during 2015 -2017 (Malaysia)

Year	Age						Total
	0 - <1	1-2	3-4	5-6	7-12	13-18	
2015	0	50	144	59	46	6	305
2016	0	92	185	124	68	4	473
2017	0	105	197	140	62	11	515

Education

Based on Table 3.9, there were 10,541 students in the Special Education Integration Programme (PPKI), 725 students in Inclusive Education Programme (PPI) and 148 students in Special Need School (SPK).

Table 3.9: Students with autism according to the type of school programmes (Malaysia)

Type of School Programmes	Number
Special Education Integration Programme (PPKI)	10,541
Inclusive Education Programme (PPI)	725
Special Need School (SPK)	148
Total	11,414

In comparison, the Ministry of Education (MOE) summarised that 67,537 students out of 83,598 students in the three (3) types of special education schools were in the category of learning disabilities. For students with autism, the highest number of them totaling 8,412 are studying in the Special Education Integration Programme while 609 students are under the Inclusive Education Programme. Only 84 of the students are in the Special Needs School. Details of the statistics as well as the programmes offered are explained in the respective sections. Students with autism who registered at GENIUS Kurnia increased from 382 students in 2016 to 472 students in 2018 as shown in Table 3.10.

Table 3.10: Students with Autism Registered at GENIUS Kurnia from 2015 to 2018

	Pre School	Early Intervention	Total
Nov 2015 - 2016	82	300	382
2017	167	232	399
2018	184	288	472

According to the National Autism Society of Malaysia (NASOM) centers for NASOM students reduced from 20 centres in 2011 to 15 centres in 2019 as shown in Table 3.11. This may be due to the reduction in the number of opening and closing balance from 2011 to 2019.

Table 3.11: Student with autism registered at the National Autism Society of Malaysia (NASOM) from 2011 to 2019

No.	Year	Opening Balance	Closing Balance	No. of Centre
1	2011	416	551	20
2	2012	551	473	20
3	2013	473	492	20
4	2014	492	521	20
5	2015	521	478	20
6	2016	478	509	20
7	2017	509	466	20
8	2018	466	394	15
9	2019	394	478	15

Employment

There were 725 placements in the public sectors and 114 placements in private sections for persons with disabilities in 2018 as shown in Table 3.12. The Policy of 1% Employment Opportunities for PWDs in the Public Service was introduced in 1988 and implemented through two (2) Service Circulars in 2008 and 2010, outlining affirmative actions to be taken by Ministries, agencies and Appointment Authorities in ensuring PWDs are given the opportunities to serve in the public service. According to the data compiled at the Public Services Department, the latest percentage shows that PWDs employed is still very low at 0.33%.

Table 3.12: Employment of PWDs in public and private sector in Malaysia (2018)

Type of Sector	No. of Placement
Public	725
Private	114
Total	839

3.6 Myanmar

Introduction

There are seven (7) types of services provided by the Department of Social Welfare in Myanmar such as Early Childhood Care and Development (ECCD) and Child Programme, Social Protection Programme, Youth Development, Women Development Programme, Promoting Decent Life and Care of the Aged, care of the persons with disabilities, Grants in Aids to Voluntary Organizations Programme and Social Protection Programme.

Number of Autism

The First Myanmar National Disability Survey 2008 to 2009 stated that 2.32% are disabled and prevalence rates of persons with disabilities are shown in Table 3.13.

Table 3.13: Prevalence rates of persons with disabilities in Myanmar (2008-2009)

Types of Disability	< 5 years (%)	6 – 15 years (%)
Physical	0.68	1.3
Visual	0.06	0.16
Hearing	0.07	0.26
Intellectual	0.07	0.3

Health Care

Setting early childhood intervention services starts from 0 to 5 years old. Rehabilitation project (2008-2013) training for trainers programmes for 1,665 medical staff focusing on special care of cerebral palsy, stroke patients and persons with spinal cord injury. Health care for

patients with physical disability is published in more than 180,000 educational journals on awareness and treatment related to physical disability. Rehabilitation conferences were conducted six times and upgrading of the National Rehabilitation Hospital.

Employment

Based on the Ministry of Labour, Immigration and Population, 4.6% of the total number of persons with disabilities are employed. Persons with visual disabilities recorded the highest percentage which is 2.5%, and persons with hearing disabilities recorded the lowest percentage which is 1.3% as shown in Table 3.14.

Table 3.14: Percentage of persons with disabilities employed in Myanmar (2014)

Types of Disability	Percentage (%)
Physical	1.8%
Visual	2.5%
Hearing	1.3%
Intellectual	1.7%

3.7 Philippines

Introduction

National Disability Prevalence Survey was done by the Philippines Statistic Authority (PSA). This survey is a general population survey that provided detailed and nuanced information on the interaction between health and the environment and collects comprehensive information on the needs of persons with different disability levels as well as on barriers and inequalities they face.

Number of Persons with Disabilities

The severe disability prevalence in 2016 was 12% in the Philippines. One in two persons experienced a moderate level of disability at 47%. Women are more likely to experience moderate to severe disability than men.

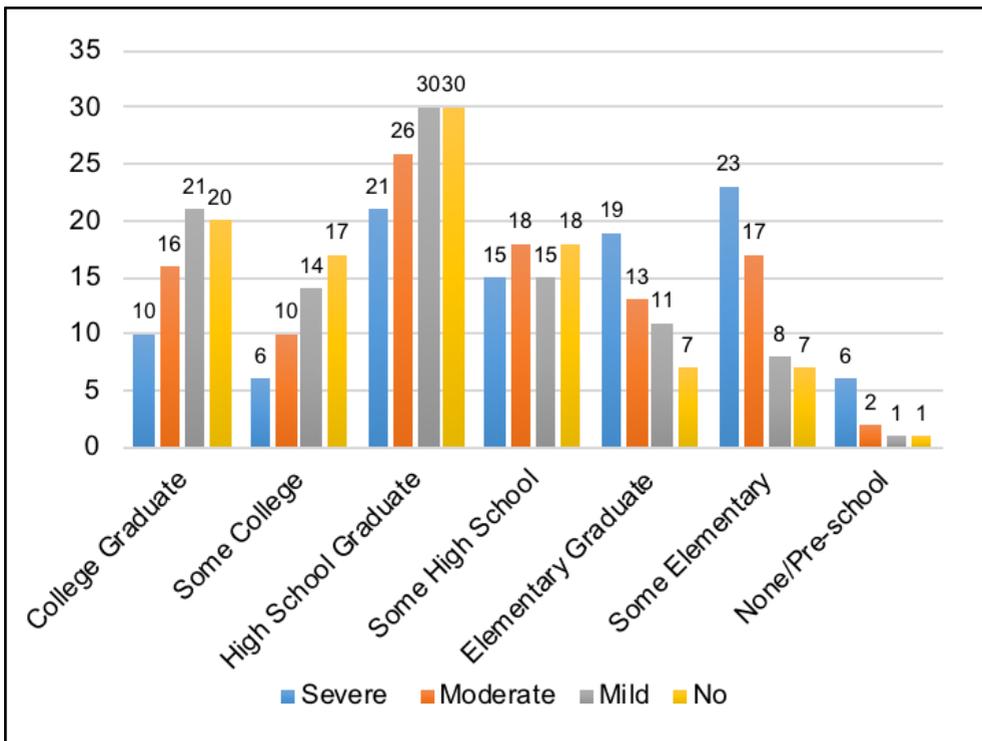
Education

The survey was done by PSA and showed that more students with disabilities were recorded in high school graduates compared to other types of schools and colleges in the Philippines (Figure 3.6). 25% of persons with disabilities have an extreme problem in receiving an education and 1% of persons with disabilities have an extreme problem in getting things done at school.

Figure 3.6: Disability level by education in Philippines

Employment

From an employment aspect, 34% of persons with disabilities have an extreme problem



in applying for and getting a job, while 11% of persons with disabilities have extreme problems when at work.

3.8 Singapore

Introduction

Singapore is a small, densely populated and diverse island city-state of 5.64 million people, comprising 4 million citizens and permanent residents and 1.64 million foreigners living and working in the country within a land area of around 724.2 square kilometres. From 2011 to 2018, the population density increased from 7,273 persons per square kilometre to 7,804 persons per square kilometre. Singapore's resident labour force comprised 2.29 million people in 2018. An estimated 3% of the resident population has some form of disability.

Number of Persons with Autism

In Singapore approximately one in 150 children has autism.

Health Care

The Singapore Government issued a Health Booklet for every child born in Singapore, to track each child's immunisation history and developmental screening progress. Under the Enabling Masterplan 2 2012-2016, it is recommended for the Health Booklet to be the major tool for developmental screening at the primary care level. An extensive network of developmental surveillance was established nation-wide. Parents will remain the primary caregivers in the developmental surveillance of their child, by using the parental checklists in the Health Booklet, which include all the red flags for persons with autism. They will be supported by primary health professionals in the community, consisting of family physicians, paediatricians, and allied healthcare workers. In addition, the pre-school teachers will also be involved as children enter infant care and early childhood centres in the community.

The currently recommended ages for developmental surveillance (often performed together with immunisation) are 4-6 weeks, 3-4 months, 6-10 months, 15-18 months, 2-3 years and 4-6 years. These 'touch-points' in the developmental surveillance content of the Health Booklet will continue to be reviewed. Children of any age with clinical and behavioural features suggestive of persons with autism are recommended for referral for comprehensive evaluation.

Employment

Singapore is committed to enabling persons with disabilities to work on an equal basis with others, as employment empowers persons with disabilities and gives them full opportunity to become integral and contributing members of society. A range of policy measures and programmes are offered to enhance the employability of job-seekers with disabilities and enable them to find gainful employment. In 2013, SG Enable was set up to enhance the employability and employment of persons with disabilities. SG Enable works with other social service agencies to provide vocational assessment of needs and readiness for open employment, job placement and job support services for persons with disabilities.

3.9 Thailand

Introduction

Based on the survey results in 2017, it was found that the population with disabilities was 3.7 million people or 5.5 percent of the total population. It increased from the year 2012 survey which was only 2.2 percent. People with difficulties or health problems that hinder them from various activities are approximately 4.1%. People with physical, mental or intellectual disabilities are approximately 4.2% and people with both disabilities are 2.8%.

Among persons with disabilities, most are physically disabled numbering 968,644 persons, hearing disabled 366,308 persons, and visual disabled 194,275 persons. In the case of autism, there are only 12,643 persons. As for education, there are 593,240 persons with disabilities (34.65%) who are out of school. For those who are educated, most of them graduated from primary school 926,840 (54.13%), high school 124,090 (7.25%) and vocational level 23,387 (1.37%).

Number of Persons with Autism

Thailand has various sources of data on persons with disabilities including autism. According to the national survey on persons with disabilities of the National Statistical Office of Thailand in 2017, there were around 3.7 million people who were classified as persons with disabilities (5.5 % of the total population). However, data as of 31 October 2018 of the Department of Empowerment of Persons with Disabilities (DIP) indicated that

there were a total number of 2,041,159 people who registered and applied for ID cards as persons with disabilities in order to get benefits of public facilities as well as other welfare and assistance from the government (3.08 % of the total population), out of this there were 12,297 persons with autism (0.60%).

Education

The majority of the autism students are receiving formal education from general school which arranges an inclusive curriculum and the smaller number of students go to the nine (9) welfare schools as shown in Table 3.15.

Table 3.15: Number of students with autism receiving educational services under the office of the basic education commission in Thailand

No	Educational Institutes that arrange curriculum for students with autism	Data updated as of	Number (person)
1	77 Special Education Center 9 Welfare School (Inclusive) for 135 persons	11 July 2018	3,287
2	And arranged parallel classroom in a school for 5 persons	10 June 2018	140
3	36 Disability-specific Inclusive School General School which arranged Inclusive Curriculum for students with autism, divided as below	10 June 2018	1,551
4	- students with autism in ordinary classrooms 4,648 persons; and - students with autism in parallel classrooms 1,320 persons	10 June 2018	5,968
Grand total			10,946

The number of students with autism in higher education in Thailand recorded 276 persons. Middle and East Region of Thailand recorded the highest cases of disability, whereas the Southern Region of Thailand recorded the least number of cases with disabilities as shown in Table 3.16.

Table 3.16: Number of students with autism in Thailand

Area	Number higher education	Male	Female	Total
Middle and East Region	24	155	27	182
Northern Region	8	32	7	39
Southern Region	1	1	-	1
Northern Region	4	41	13	54
Total	47	229	47	276

Divided by Age Range

Age between 2 – 18 Years old total of 139 persons

Age between 18 – 30 Years old total of 137 persons

Employment

The Department of Empowerment of Persons with Disabilities is a national focal point on disability issues and authorized to empower, and carry out tasks relating to disability at both national and international levels. The Department of Empowerment of Persons with Disabilities promotes the empowerment of persons with disabilities and cooperates with other relevant stakeholders by generating provincial and general disability service centres as a local mechanism to support equal access to the rights of persons with disabilities. Under the Department of Empowerment of Persons with Disabilities, there are two centres for Empowerment and Development of Autism, Khon Kaen Province and Center for Empowerment and Development of Autism, Nonthaburi Province with the aim of promoting capacity development in living, social skills, behavioural skills, vocational preparation and as advocate to government and private agencies. As of January 2018, there were 189 persons with autism in these centres.

3.10 Vietnam

Introduction

In Vietnam, there are about 11.3 million elderly people, 6.2 million persons with disabilities and 1.5 million children with special situations. At present, there are an estimated of 6.2 million persons with disabilities at 7.06% of the population aged 2 years and older of which females is approximately 58%, children approximately 28% and people with severe and special severe disabilities is approximately 29%.

Number of Persons with Autism

By the end of 2018, an estimated 1.5 million persons with disabilities were granted certificates of disabilities. In addition, there are about 200,000 people with autism recorded in Vietnam.

Health Care

The diagnostic rate of children with autism tends to increase compared with other diseases and types of disability of children. Programmes and services for persons with autism are provided by government and non-government organizations. The main support for health care activities includes early detection and intervention, orthopaedic surgery and provision of assistance tools for persons with autism.

4.1 Early Intervention

In the early years, the brain is primed to develop language and social skills. Teaching these skills in this stage of life is crucial for individuals with autism because the brain expects to learn them (Franz & Dawson, 2019). Table 4.1 shows that most Southeast Asia countries provide an early intervention programme for children below 6 years old. The programmes might be different among these countries based on the facilities, expertise, and financial support.

Brunei Darussalam

Country's universal child health surveillance programme via Maternal and Child Health services is the early intervention of children with autism in Brunei where most of the early detection procedures are practiced at the government agencies like Child Development Centre (CDC) and the Paediatrics Department in Suri Seri Begawan (SSB) Hospital in Kuala Belait. Universal child health surveillance programmes in Brunei also provide excellent opportunities for the early detection of children with autism, both centres provide early intervention services for other disabling conditions. From 2010, the CDC ran the National Autistic Society Early-Bird Programme for Parents of Children with Autism and since 2016, this had been replaced by the Ministry of Health's Parent Education Programme on Autism (PEPA) for the parents whose children have been recently diagnosed with ASD. In addition, there are also non-government organizations providing early intervention services for persons with autism, which include non-profit organizations (Smarter Brunei, Pusat Ehsan Al-Ameerah Al-Hajjah Maryam & Learning Ladder Society) and private organizations throughout the country.

Cambodia

Government and non-governmental organizations play a crucial role in early intervention programme execution. There is plethora of early intervention programmes conducted such

as Hand of Hope Community, Karona Battambang, Komar Pikar, OIC, Safe Haven, Grace House Community Center, and CIF (ABLE Project). In fact, non-profit organizations have collaborated with healthcare authorities in pre-post and postpartum prevention by creating case management and personalized support plan for children. Moreover, the small early intervention unit of the Centre for Child and Adolescent Mental Health (CCAMH) provides service to about 60 to 80 children a month, focusing on 8 areas of child developmental activities (Social, cognition, language, hearing, vision, gross motor, fine motor, and self-care) using the blue book published by the Health Institution.

Indonesia

Stimulation of Early Intervention Detection is a guidebook compiled by the Ministry of Health to screen children who experience developmental problems or problems at the health centre level. This guideline also reviews the early detection of autism using M-CHAT. It is designed to identify children who may benefit from a more thorough developmental and autism evaluation. The screening can be used for the initial process, a thorough diagnosis should address using DSM 5 by the clinicians. Early detection of SDQ and SRQ is for scoring early detection of emotional and behavioural problems for children aged 4 to 18 years (SDQ) and for those over the age of 20 years (SRQ).

Lao PDR

In Lao PDR, early intervention is conducted by non-profit organizations such as Vientiane Autism Centre and Pakse Autism Centre under the Association for Autism (AfA) Laos. The example of early intervention programme conducted by AfA is to disseminate knowledge and raise awareness about autism among society and cooperating with experts in the medical field for successful early intervention programme. There is very limited involvement of the government in early intervention programmes for persons with autism in Lao PDR.

Malaysia

Early intervention programme involves various agencies led by the Department of Welfare. There are many early intervention programmes for persons with autism executed by the government which cover several phases of development from children to adult such as registration programme for PWDs including PWA, Disability Equality Training (DET),

Disability Related Service Training (DRST) Programmes, Child Care Centres for PWDs, Care Centres for PWDs (Taman Sinar Harapan), Sheltered Workshop, Industrial Training, and Rehabilitation Centre. Besides that, Community Based Rehabilitation (CBR) like Home Help Services and National Autism Society of Malaysia (NASOM) has a significant role to provide early intervention services for PWA in Malaysia.

Myanmar

Most of the early intervention of persons with autism are taken for children below 5 years of age via setting early childhood intervention service and Early Childhood Care and Development (ECCD) under the Department of Social Welfare.

Philippines

Autism Society Philippines (ASP) provides many early intervention services for persons with autism. Besides, they do a lot of training and workshops for early intervention programmes for Filipino children with autism.

Singapore

Early intervention programmes for persons with autism are led by the Government via Early Intervention (EI) programmes where children under the age of seven with developmental needs can receive intervention through government-funded EI programmes. Children with mild developmental needs are supported by the Development Support (DS) and Learning Support (LS) programmes, in a preschool setting. In 2018, 550 preschool centres offered DS-LS, up from 350 in 2016. Children with moderate to severe developmental needs are supported through the Early Intervention Programme for Infants and Children (EIPIC), provided at EI centres. There are currently 21 EIPIC centres operating in Singapore, run by 10 Social Service Agencies. In 2019, Singapore enhanced support for children with developmental needs, building on the efforts of the Third Enabling Masterplan. Beginning July 2019, the Government is investing around S\$60 million a year to make fees for EI services much more affordable and to provide two new EI programmes which are EIPIC Under-2s and DS-Plus.

Besides that, another early intervention programme in Singapore is Pilot Private Intervention Providers (PIPI) - a subsidy scheme that complements EIPIC by offering more choices of

early intervention programmes for children who have been referred for the EIPIIC. Parents who choose to enrol their children in selected Private Intervention Centres will receive subsidies that will help defray enrolment costs. There are inclusion programmes and services for children with special needs including persons with autism at the preschool level such as government-funded integrated child care programme (ICCP) in preschools and inclusive preschools.

Thailand

Early intervention services provided by the Department of Mental Health and Special Education Center under the Regional and Provincial Educational Area. Currently, there are 77 centres throughout the country. It is responsible for organizing and promoting education in Early Intervention (EI) and preparing for all types of persons with disabilities. It includes transferring these children with disabilities to child development centres, general inclusive education schools and disability-specific schools.

Vietnam

Early intervention programme for persons with autism services provided by government agencies are available at least in major cities.

Table 4.1: Early intervention programmes provided by ASEAN countries

Country	Programme
Brunei Darussalam	<ul style="list-style-type: none"> ▪ Programme-Maternal and Child Health services ▪ Government agencies involved: The Child Development Centre (CDC) and The Paediatrics Department in Suri Seri Begawan (SSB) Hospital in Kuala Belait ▪ Non-profit Organization involved: <ul style="list-style-type: none"> - SMARTER Brunei – this centre caters exclusively for children and young adults with autism. - Pusat Ehsan Al-Ameerah Al-Hajjah Maryam - Learning ladders Society

Cambodia	<ul style="list-style-type: none"> ▪ Hand of Hope Community, Karona Battambang, Komar Pikar, OIC, Safe Haven, Grace House Community Center, and CIF (ABLE Project) ▪ Early intervention unit Caritas-CCAMH provides service to about 60 to 80 children a month, focussing on 8 areas of child development activities (Social, cognition, language, hearing, vision, gross motor, fine motor, and self-care) using the blue book published by HI. ▪ Sensory stimulation needs, communication strategies ▪ DDSP has intervened in Autism on issues of food shortage and other abuses
Indonesia	<ul style="list-style-type: none"> ▪ Stimulation of Early Development Intervention Detection is a guidebook ▪ SDQ for children aged 4 to 18 years old, SRQ for someone age of 20 years ▪ PAUD handbook related to child growth and development screening used by PAUD
Lao PDR	<ul style="list-style-type: none"> ▪ Provided by: <ul style="list-style-type: none"> - Vientiane Autism Centre - Pakse Autism Centre
Malaysia	<ul style="list-style-type: none"> ▪ Department of Social Welfare <ul style="list-style-type: none"> - Registration for PWDs - Disability Equality Training (DET) - Disability Related Service Training (DRST) Programmes - Child care centres for PWDs - Care Centres for PWDs (Taman Sinar Harapan) - Sheltered Workshop (Bengkel daya / Terindung) - Industrial Training and Rehabilitation Centre (Pusat Latihan Perindustrian dan Pemulihan) - Community Based Rehabilitation (CBR) <ul style="list-style-type: none"> ○ Home Help Services ○ National Autism Society of Malaysia (NASOM)
Myanmar	<ul style="list-style-type: none"> ▪ Setting early childhood intervention service (0-5 years age group)

Philippines	Autism Society Philippines (ASP) provides many early intervention services for PWA. Besides, they do a lot of training and workshops for early intervention programmes for Filipino children with autism.
Singapore	<ul style="list-style-type: none"> ▪ Early Intervention programmes <ul style="list-style-type: none"> - EIPIC Under-2s - DS-Plus ▪ Pilot Private Intervention Providers (PIIP) ▪ Government-funded integrated child care programme (ICCP) in preschools ▪ Inclusive preschools
Thailand	<ul style="list-style-type: none"> ▪ Service provided by Department of Mental Health
Vietnam	<ul style="list-style-type: none"> ▪ Early detection and intervention, orthopaedic surgery and provision of assistance to persons with disabilities

4.2 Health

Striving for optimal health and enduring a healthy lifestyle comes with the ability to access appropriate healthcare services, yet persons with autism have unmet healthcare needs which may impact their everyday lives. The healthcare needs of persons with autism are complex and require a range of integrated services, including health promotion, care, rehabilitation services, and collaboration with other sectors such as education, employment and social care (Calleja et al., 2019). Table 4.2 shows the healthcare programme available in South-East Asia countries. Most of the countries focus on healthcare programmes for children with autism and are very limited for adults with autism.

Brunei Darussalam

The national health care policy of universal coverage ensures high accessibility of comprehensive healthcare services provided through a network of health facilities for all Bruneians including those persons with autism. There are hospitals, health centres and clinics, dental services situated in all the districts. All Bruneians, including persons with autism have free access to these services and in areas where these facilities are physically inaccessible, travelling clinics and flying medical services are provided. Other services include the Community Psychiatry Service and Home-Based Nursing Service for persons with various disabilities who are unable to leave their homes. Assistive devices are provided for

persons with various disabilities to help them optimize their function and live as independently as possible. The Rehabilitation Services and Department of Paediatric Services assesses persons with various disabilities of their abilities and needs and prescribes suitable assistive devices. The Ministry of Health provides only basic prosthetic limbs, orthoses and hearing aids to persons with various disabilities.

Cambodia

Healthcare programmes are provided by the Ministry of Health via national hospitals, referral hospitals and health centres. The government provides services such as assessment and treatment free of charge for persons with disabilities including persons with autism at all levels and all classes. For identifying and early screening of children with autism, the Ministry of Health working together with Ministry of Social Affairs, Veterans and Youth Rehabilitation will issue the inter-Ministerial declaration on Type and Level of Disability classification. Currently, Cambodia has 11 physical rehabilitation centres, 2 medical rehabilitation centres which have the capacity and capability to provide services free of charge to persons with autism. Besides that, there is a psycho-education programme on autism by disseminating brochure and newsletter for additional information.

Indonesia

There are three (3) health programmes for persons with autism such as promotive, preventive, and curative programme to enhance the health status of people with autism in Indonesia. The promotive programme's aim is advocacy and outreach to society regarding autism healthcare through development of IEC media. Besides that, the preventive healthcare programme consists of three (3) components such as early detection, mapping and research, and risk control which are protective measures by managing several risk factors that influence the occurrence of autism. Training for health workers and provision for child health services are the activities implemented in the curative programme. Rehabilitative efforts include providing services for persons with autism healthcare via integrated treatments. They include medical therapy for mentosa, functional therapy and biomedical therapy.

Lao PDR

Most of the health programmes for persons with autism are driven by government agencies and non-profit organizations. Besides initial screening at the Child Development Clinic at Children Hospital Vientiane, the Centre of Medical Rehabilitation under the Ministry of Health

offers limited services to children with autism. The Lao Friends Hospital for Children in Luang Prabang is able to offer ASD diagnosis with very limited competent persons. However, the provision of services for persons with autism is being reviewed by the government.

Malaysia

Persons with autism health programmes involve various government agencies lead by the Ministry of Health (MOH). To ensure the continuity of child health care and to provide good health services for children, the Ministry of Health (MOH) has introduced a new home-based Child Health Record Book (Baby Health Record, 0-6 years old) that contains growth and development screening. Autism screening M-CHAT (Modified Checklist for Autism in Toddlers) was introduced as a screening tool and was incorporated into this new home-based Child Health Record. The implementation of this record book was done in phases and expanded to all states in Malaysia by the end of 2012. Screening using M-CHAT to children attending Health Clinic was made compulsory to all children age 18 months to 3 years old. This was to ensure the early detection of disabilities, particularly autism, and to evaluate their health status. This record book also serves as a guideline.

Children suspected of having autism were then referred to the respective multidisciplinary team for further evaluation and early intervention. Early intervention involves multidisciplinary team management from hospitals and primary healthcare, with the support and involvement of caregivers, school teachers and other related agencies. The benefits of the early identification of persons with autism are recognized by parents and professionals alike. While there is as yet no suitable test for the universal screening of pre-school children for autism, the identification of persons with autism can nevertheless be improved by the increased recognition of warning signals to identify those children for whom further assessment is needed.

In hospital setting, assessment and diagnosis for persons with autism will be conducted by general paediatricians or Child and Adolescent Psychiatrists or Developmental Paediatricians. They will do the diagnostic evaluation based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). In selected cases, standardized diagnostic tools such as the Autism Diagnostic Observation Schedule (ADOS) are offered. Medical follow-up is mandatory to look into (i) parenting and child behaviour support, (ii) issues / medical comorbidities which may need medication such as seizures, ADHD, severe aggressive behaviours and sleep disorders, (iii) monitoring of child's developmental progress. Apart from that, early intervention services provided by allied health such as private agencies and

non-profit organizations are: (i) speech and language therapy, (ii) occupational therapy – to support behaviour, ADL and school function and (iii) clinical psychologists.

Myanmar

Rehabilitation project has been executed since 2008 where 16 healthcare training programmes have been provided for 1,665 medical staff from special care of cerebral palsy, stroke patients, persons with spinal cord injury, and persons with autism. Rehabilitation conferences were conducted six times and upgrading the National Rehabilitation Hospital was initiated. Besides that, a caring for physical and mental disability programme has been introduced by the government. Over 180,000 educational journals on awareness and treatment of physical and mental disabilities including persons with autism were distributed to medical staff in rural areas. Community-based health care services were also implemented with aid from the Ministry of Health (MOH).

Philippines

Most of the health programmes for persons with autism in the Philippines were driven by the government agencies and non-profit organizations.

Singapore

In Singapore, healthcare and long-term care is financed by multiple different but overlapping schemes that provide holistic and robust support for healthcare costs. This ensures that all Singaporeans, including persons with autism, will not be denied access to appropriate healthcare due to inability to pay. The Government provides heavy subsidies of up to 80% to Singaporeans for treatment across all public healthcare institutions, e.g. acute and community hospitals, polyclinics. This also applies to residential and non-residential services in the long-term care space, which covers psychiatric services that persons with autism may need. In private primary care, all Singaporeans may also benefit from the Community Health Assist Scheme (CHAS) subsidies.

For greater protection against large hospitalization bills, MediShield Life was launched in 2015 to provide universal medical insurance to all Singaporeans for life, regardless of age and any pre-existing conditions or disabilities they might have. Singapore also has MediSave,

a national healthcare saving scheme that allows Singaporeans to set aside part of their income for their future healthcare needs. To provide greater protection against long-term care costs, the Government will launch CareShield Life from mid-2020, a basic long-term care insurance scheme that is enhanced from the existing ElderShield, providing higher pay-outs for as long as a policyholder remains severely disabled. Coverage starts from age 30, and is universal for those born in 1980 or later, so Singaporeans can be covered regardless of any pre-existing conditions or disabilities. Coverage is optional for those born in 1979 or earlier, and they can join CareShield Life if they are not severely disabled. There are also various disability-related schemes that Singaporeans can benefit from, such as the Pioneer Generation Disability Assistance Scheme (PioneerDAS), Home Caregiving Grant (HCG) and ElderFund.

Persons with autism can tap into their family members' MediSave, and may be eligible for MediSave top-ups from the Government through the various Government schemes for the needy. Premium subsidies are also available for national insurance schemes such as MediShield Life and CareShield Life to ensure that premiums are affordable and no one loses coverage due to the inability to afford their premiums. The Government also provides a safety net through MediFund, to aid Singaporeans who need further assistance with their healthcare bills after subsidies, insurance and MediSave.

Thailand

The Thai government supports independent living for persons with disabilities including persons with autism that allows them to live their daily lives independently and define their own way of life by becoming self-reliant or having some assistance from others or the society. Department of Mental Health (DOMH) reported that in year 2018, Thailand had 18,220 persons with autism with less than 100 of them having an income. DOMH also emphasised that if those with autism had been officially diagnosed and received therapy before age of 5, it would have been better in promoting and strengthening them to be able to live independently. DOMH has executed a series of awareness programme on autism to raise social awareness on how to take care of persons with autism. Besides, the Community-Based Rehabilitation programme supported by the Department of Public Welfare aims to improve the quality of life and healthcare of persons with autism.

Vietnam

In Vietnam, there is the care and assistance model for children with autism. The aims of this programme are care, rehabilitation and education for children with autism; helping children to build and develop knowledge, and physical and psychological skills. This programme consists of three (3) components such as health care, psychological support and rehabilitation, educating psychological and physical skills, especially focusing on motion and language skills, simple personal and social skills, preparation for school skills, and organizing entertainment, amusement and communication integration activities.

Table 4.2: List of health programmes provided by ASEAN countries

Country	Programme
Brunei Darussalam	<ul style="list-style-type: none">▪ High accessibility of comprehensive health care services▪ Community Psychiatry Service▪ Home-Based Nursing Service▪ Assistive devices are provided for persons with different abilities including PWA
Cambodia	<ul style="list-style-type: none">▪ Psycho-education on autism by giving brochures for participatory assessment on levels of autism and newsletter for additional information▪ Assessment and treatment at our Medical Clinic▪ Nurses do full assessment and health education▪ Referrals for medical treatment and provision of hygiene and health equipment▪ Referral of children to rehabilitation health services with other organizations▪ Direct exercises with Autistic children on how to eat, how to focus, or to exercise, allowing him or her to engage in activities with their peers▪ Redirect children with autism to health services

Indonesia	<ul style="list-style-type: none"> ▪ Promotive methods include: <ul style="list-style-type: none"> - Advocacy and outreach - Development of IEC Media ▪ Preventive methods include: <ul style="list-style-type: none"> - Early detection - Mapping and research - Risk control ▪ Curative methods include: <ul style="list-style-type: none"> - Training for health workers - Provision of child friendly health service facilities with special needs. - Rehabilitative efforts include providing services ▪ ASD disorders require integrated treatment, namely medical therapy for mentosa, functional therapy and biomedical therapy.
Lao PDR	<p>Most of the health programme for persons with autism are driven by government agencies and non-profit organizations</p>
Malaysia	<ul style="list-style-type: none"> ▪ Ministry of Health <ul style="list-style-type: none"> - Autism Spectrum Disorder (ASD) Screening Programme - Early intervention involves multidisciplinary team management from hospital to primary health care. - Parenting and child behaviour support - Issues/medical comorbidities - Monitoring of child's developmental progress ▪ Intervention service by allied health will look into: <ul style="list-style-type: none"> - Speech and language therapy - Occupational therapy – to support behaviour, ADL and school function - Clinical psychologists

Myanmar	<ul style="list-style-type: none"> ▪ Rehabilitation project (2008-2013) – 16 training for trainers programmes for 1665 medical staffs ▪ Caring physical disability <ul style="list-style-type: none"> - Rehabilitation conferences - Implementing community-based health care services
Philippines	<ul style="list-style-type: none"> ▪ Most of the health programmes for persons with autism are driven by government agencies and non-profit organizations.
Singapore	<ul style="list-style-type: none"> ▪ Community Health Assist Scheme (CHAS) ▪ MediSave ▪ CareShield Life ▪ Pioneer Generation Disability Assistance Scheme (Pioneer-DAS) ▪ Home Caregiving Grant (HCG) ▪ Elder Fund
Thailand	<ul style="list-style-type: none"> ▪ Independent Living for Persons with Disabilities <ul style="list-style-type: none"> - Community-Based Rehabilitation (CBR)
Vietnam	<ul style="list-style-type: none"> ▪ Care and assistance models for children with autism ▪ Functions of models ▪ Responsibilities of Models: <ul style="list-style-type: none"> - Health care, psychological support and rehabilitation - Educating psychological and physical skill - Preparation of the school skills

4.3 Education

Autism is a lifelong developmental disorder that affects a person's understanding of what they see, hear and sense. Hence, education and autism spectrum disorders are an important aspect to be considered. Moreover, children on the autism spectrum could face some difficulties in understanding or communicating their needs to teachers and fellow students. Apart from that, they can have difficulty understanding directions and instructions in the classroom, along with subtle vocal and facial cues of teachers. This results in problems with communication and social skills. Table 4.3 shows the educational programmes provided by ASEAN countries.

Brunei Darussalam

As mentioned in Table 4.3, the government of Brunei Darussalam provided an inclusive education policy where no segregation of schools for persons with disability. In Brunei, the Special Education Needs Assistance (SENA) provides education services for disabled in school. The Government is currently establishing Centre of Excellence for students with disability, after a successful attempt at establishing a Model Inclusive Schools of Excellent Services for Children (MIS) earlier in 2008 and 2009. Under the services of the Religious Special Education Unit, Religious Schools Division, Department of Religious Studies, Ministry of Religious Affairs; several programmes for persons with disability has been launched.

Cambodia

As in Cambodia, the government creates Caritas-CCAMH system to provide structured teaching (TEACCH) in schools, special need programmes at Education Center, inclusive education in primary schools, special training programmes for educators, special education for children with autism, and developing the capacity of teachers in teaching methods for children with autism.

Indonesia

Indonesia has taken steps in enhancing awareness and understanding to handle issues of education for autism. School is critical for students with autism to develop academic,

social, and life skills necessary for independence. This means that the responsibilities of schools, teachers and children's parents, as well as other professionals who work with children with autism are huge. Hence, Sekolah Luar Biasa (SLB) school was established, which is a special school for school-age children who have special needs and aims to help students with physical and/or mental, behavioural and social disorders to be able to develop attitudes, knowledge and skills as individuals and community members in establishing reciprocal relationships. Teachers will be trained in the social, cultural and natural environment and can develop skills in the world of work or attend further education for the purpose of education in autism.

Lao PDR

The Lao People's Democratic Republic (Lao PDR) Inclusive Education (IE) Project is one of the longest-running projects of its kind internationally. Mostly the services are provided by the Vientiane Autism Centre, Pakse Autism Centre, and Intellectual Disability Association Vientiane. They provide a good service to those that need attention in terms of autism's awareness programme and training where needed.

Malaysia

In Malaysia, the Ministry of Education has provided some activities to educate people on autism. Moreover, GENIUS Kurnia which is a body responsible for educational programmes as in early intervention programmes and family support. Furthermore, programmes such as pre-school programme, community education programme, weekend workshop / onsite training and Ausome Café are introduced. Besides that, iKurnia and School teacher training are activities to inculcate awareness and educate people. Nation-wide training and National Youth Training Institution (Institut Kemahiran Belia Negara) are also being implemented to further strengthen the understanding of autism. Those activities are very useful and rewarding for children as well as families to handle autism's issues and challenges.

Myanmar

In Myanmar, programmes such as special schools and strong transition programmes for children from home and pre-school are for the inclusiveness of kindergarten and primary school. Building barrier-free environments for children with disabilities in pre-primary and primary school are meant for inclusive education. Skill-training programmes for teachers in dealing with persons with disabilities, developing curriculum on special education methods,

instilling awareness for the right to education, and conducting workshop for education opportunities and services are being encouraged and put forward for the community to be more involved and aware.

Philippines

The Philippines has the CereCare Philippines, which is a family-centred facility. It is a home to offer special children with hope and a future with the help of variety of programmes and therapeutic interventions designed to facilitate individuals with special needs. It is recognized by the Department of Education (DepEd), Department of Health (DOH), Department of Social Welfare and Development (DSWD), Philippine Council for NGO Certification (PCNC) and Bureau of Immigration (BI), CereCare steps up to cater for conductive education to facilitate growth and development. Overall, it can educate special needs children and their families to instill a better understanding of the challenges they have throughout their lives.

Singapore

In Singapore, the support for students with special educational needs (SEN) is a compulsory education framework where special education (SPED) schools have capacity-building for staff in mainstream schools. It also has teacher capacity, allied educators (Learning and Behavioural Support), community integration support and provision of assistive technological (AT) devices in mainstream schools. Moreover, access to mental health services, support for SEN in Institutes of Higher Learning (IHLs), Special Student Care Centres (SSCCs), Artist Development Programme and Autism Support Programme for Institute of Technical Education (ITE) students run by ARC and Temasek Cares are designed to help those in need to handle cases of autism.

Thailand

In Thailand, ISP (Individualized Services Plan), learning plan for students, create a peer-to-peer system (buddy system), effective educational support services for students with disabilities and projects to develop capacities of students, such as social skills training, independent living training and living with others are established to educate people in general. Besides that, coordinating with multidisciplinary professionals to help develop social skills, adaptation, behaviour, and emotions of students with autism is also being increased as well as providing quality advice/consulting services in university. The university in the form of the cooperation network is implemented in providing quality and suitable

teaching and learning facilities, student dormitory service and promoting cooperation between organizations both internal and external. Moreover, special care arrangements by the university for students with autism are introduced and moral support as needed for it to be maintained.

Vietnam

In Vietnam, education approach support, vocational support and job creation are gaining support from all corners of the country. Projects in Hanoi with Vietnam’s Ministry of Education and Training and National College of Education (NCE) are evidence that education is the key to foster awareness and skills in terms of matters related to autism. However, many mainstream teachers are lacking knowledge and skills to teach students with autism in inclusive settings, particularly in the least-developed countries. Therefore, education should be emphasised to make people understand and aware.

Table 4.3: List of educational programmes provided by ASEAN countries

Country	Programme
Brunei Darussalam	<ul style="list-style-type: none"> ▪ Special Education Needs Assistance (SENA) ▪ Model Inclusive Schools of Excellent Services for Children (MIS) ▪ Religious Special Education Unit, Religious Schools Division, Department Of Religious Studies, Ministry Of Religious Affairs <ul style="list-style-type: none"> o Intervention Programme by Pull-Out System o The National Religious Programme for Religious and Arabic Schools o Religious Internship Programme [Program Latihan Amali Ugama] o Cued Speech Programme o Oral and written test / examination and Religious Education Primary Schools Certificate (SSSRU) examinations o Centralization of mid-year and final year examination o Recitation of the holy Quran during the holy month of Ramadan

Cambodia	<ul style="list-style-type: none"> ▪ Caritas-CCAMH provides structured teaching (TEACCH) to about 40 to 50 children a month ▪ Special Needs Programme at our Education Center ▪ Inclusive Education in primary schools ▪ Provides special education and life skills through games and pictures ▪ Provides special education for teaching skills and to parents to know how to handle the disabilities ▪ Project staff educate autistic children so that they can communicate with their classmates, their families and their neighbours in the community through the use of real-world ▪ Trains teachers on environmental education, including the production of learning and teaching materials ▪ Provides education for children with autism, self-help skills, social skills, language skills, and movement skills ▪ Builds the capacity of teachers in teaching methods for children with autism
Indonesia	<ul style="list-style-type: none"> ▪ Autism Service Centers ▪ Inclusive school ▪ Training of inclusive school teachers ▪ SLB school ▪ Special tutors for teachers
Lao PDR	<ul style="list-style-type: none"> ▪ Provided by: <ul style="list-style-type: none"> - Vientiane Autism Centre - Pakse Autism Centre - Intellectual Disability Association Vientiane

Malaysia	<ul style="list-style-type: none"> ▪ Ministry of Education ▪ GENIUS Kurnia <ul style="list-style-type: none"> - Early intervention programmes and family support - Pre-school programme - Community Education Programme <ul style="list-style-type: none"> ○ Weekend workshop / onsite training ○ Ausome Café ○ iKurnia ○ School teacher training ○ National wide training ○ National Youth Training Institution (Institut Kemahiran Belia Negara)
Myanmar	<ul style="list-style-type: none"> ▪ Special schools ▪ Strong transition programme for children from home and preschool to inclusive kindergarten and primary school building barrier-free environments for children with disabilities in pre-primary and primary school ▪ Inclusive education: <ul style="list-style-type: none"> - skills-training for education teachers in dealing with disabilities - develop curriculum on special education methods - awareness raising for the right to education - conducting workshop for education opportunities and services
Philippines	<ul style="list-style-type: none"> ▪ Autism tutor <ul style="list-style-type: none"> - Integrated school - CereCare Philippines a family-centered facility

Singapore	<ul style="list-style-type: none"> ▪ Support for Students with special educational needs (SEN) in Singapore: <ul style="list-style-type: none"> - Compulsory education framework - Special Education (SPED) schools - Building capacity of staff in mainstream schools - Teacher capacity - Allied educators (Learning and Behavioural Support) ▪ Community integration support and provision of assistive technological (AT) devices in mainstream schools ▪ Access to mental health services ▪ Support for SEN in Institutes of Higher Learning (IHLs) ▪ Special student care centres (SSCCs) ▪ Artist Development Programme ▪ Autism Support Programme for Institute of Technical Education (ITE) students run by ARC and Temasek Cares
Thailand	<ul style="list-style-type: none"> ▪ Individualized Services Plan (ISP) ▪ Learning plan for student ▪ Create peer-to-peer system (Buddy System) ▪ Provide effective educational support services for students with disability ▪ Organize projects to develop capacities of students, such as social skills training, independent living training and living with others ▪ Coordinate with multidisciplinary professionals to help develop social skills, adaptation, behaviour and emotions of students with autism ▪ Providing quality advice/consulting services in university ▪ Providing quality and suitable teaching and learning facilities ▪ Student dormitory service ▪ Promote cooperation between organizations both internal and external. ▪ Special care arrangement by the university for students with autism
Vietnam	<ul style="list-style-type: none"> ▪ Education supports, vocational supports and job making

4.4 Employment

Many persons with autism are demonstrating their competence in a wide variety of industries and at all ranks within businesses around the world. But for the vast majority, these job opportunities are not being made available to them. Table 4.4 shows the employment programmes provided by ASEAN countries.

Brunei Darussalam

Brunei Darussalam recognizes the rights of persons with disability to work and to gain a living by participating in the labour market whilst an open work environment. Pusat Bahagia and The Youth Development Center under the Ministry of Culture, Youth and Sports provided several programmes and opportunities that are available for persons with disability to undergo skills development courses that will enable them to find employment or start their own businesses, training for entrepreneurship (self-employment) and social enterprises. Community Based Rehabilitation Unit also works with strategic partners to provide work placement for 3 months and job matching. Beside, in the final years of the Pre Vocational Programme (PVP) under Special Education Unit, Ministry of Education; students with different abilities at Government secondary schools will undertake a work attachment (for three to six months) to provides them with work-related skills at various industrial placements.

Cambodia

The Ministry of Social Affairs, Veterans and Youth Rehabilitation of Cambodia provide vocational skill training in collaboration with Caritas-Youth Development programme (YDP), Takhmao, Kandal province, which includes cooking, sport, art, and handicraft. The Ministry of Social Affairs, Veterans and Youth Rehabilitation allowed some autistic youths to work in offices related to simple documentation, cleaning, or snacks for guests, etc.

Indonesia

Indonesia promotes the of rights of persons with disabilities, facilitation of disability workforce placement in private companies and entrepreneurship empowerment and training for persons with disabilities. For example, Autism Care Indonesia is part of the big picture of the sustainability autism programme in Indonesia.

Lao PDR

The Disability Law and draft National Policy on Persons with Disabilities of Lao PDR promote the full participation of persons with disabilities in employment. Furthermore, Asian Development with Disabled Persons (ADDP) was working collaboratively with the Association for Intellectual Disability on the project improving quality of life and vocational training for persons with intellectual disability between 2017 to 2019. The Association for Autism (AfA) and Vientiane Autism Centre (VAC) has set up a vocational training unit under VAC to train students to plant sunflower sprouts, make key rings, painting, making postcards and sport. These are examples of planning for future effort for employment for persons with autism.

Malaysia

In Malaysia, the Department of Social Welfare, Public Service Department has been supporting employment through Job Coaching Services. It also is seen as the strategist for paid work, continuous support, integration in the workshop, job-matching and placement system for persons with disabilities and self-employment. It will support the employment incentive and is definitely a boost for more good things to happen in future development in employment for persons with autism.

Myanmar

Myanmar has developed the Rights of Persons with Disabilities law which describes separate chapters for employment opportunities of persons with disabilities and promoting the private sector for accessible workplace. It has activities to conduct advanced vocational training and pre-job training. This is a knowledge transfer for the interest and attention of the private sector on job placement for persons with disabilities. Conducting workshop for job opportunities with the Department of Labor and the private sector also enhances the skills and gives persons with autism moral support to be with the local community.

Philippines

As in the Philippines, autism groups team up with local firms to give jobs to persons on the autism spectrum. This a good way for persons with autism to get the opportunity to be employed and bring out the best in them. Through this project, they are train and educated for future employment.

Singapore

The programme SG Enable helps in ways such as SG Enable Institutes of Higher Learning (IHL) Internship Programme, SG Enable RISE Mentorship Programme, SG Enable Job Shadowing Day, Job Placement Job Support (JPJS), School-to-work Transition Programme and Workplace Disability Inclusive Index. Workfare Income Supplement Scheme (WIS) is a scheme of Work Training Support Scheme (WTS), Special Employment Credit (SEC), Skill Future Study Awards (SFSA) and Open Door Programme (ODP). These help persons with autism to be more independent and build up their confidence for future employment. As in specialised employment services and supports for persons with autism by SSAs, it has Employability and Employment Centre and Professor Brawn Café, which are strategies formulated to encourage persons with autism.

Thailand

Thailand has Disability-Inclusive Business (DIB) which include businesses run by persons with disabilities, employment of persons with disabilities in private sectors, branding and development for products of persons with disabilities, training, and policies on Disability-Inclusive Business and tax incentives related to persons with disabilities. Job payment for persons with disabilities, expenses for providing equipment, facilities or service to employees with disabilities, exempt from income tax and other benefits are carefully looked at for better strategies in employment. The cooperation with the business sectors in the target community and public policies on disability-inclusive business by persons with disabilities are also established. Partnership with business sectors and network system management are encouraged to give the opportunity for persons with autism for employment.

Vietnam

In Vietnam, the community in general, and health services for children in particular, have a rudimentary understanding of autism. Vocational supports and job making are the agenda of the government to assist and give opportunities for persons with autism employment they dream of, or dare to have.

Table 4.4: List of Employment programmes provided by ASEAN countries

Country	Programme
Brunei Darussalam	<ul style="list-style-type: none"> <li data-bbox="595 388 1267 446">▪ Pusat Bahagia, under the Department of Community Development is a skill training (job coaching) center for PWDs <li data-bbox="595 466 1183 525">▪ The Youth Development Centre runs vocational and skills-training courses <li data-bbox="595 544 1253 633">▪ Community Based Rehabilitation Unit also works with strategic partners to provide work placement for 3 months and job matching. <li data-bbox="595 652 1239 711">▪ Special Education Unit collaborate with employers to provide suitable work attachment
Cambodia	<ul style="list-style-type: none"> <li data-bbox="595 727 1169 834">▪ Ministry of Social Affairs, Veterans and Youth Rehabilitation provided vocational skills training in collaboration with Caritas-Youth Development programme (YDP), Takhmao, Kandal province <li data-bbox="595 854 1239 893">▪ Provide skills such as cooking, sport, art, and handicraft. <li data-bbox="595 913 1267 991">▪ Ministry of Social Affairs, Veterans and Youth Rehabilitation allow some autistic youths to work in offices related to simple documentation, cleaning, or snacks for guests, etc.
Indonesia	<ul style="list-style-type: none"> <li data-bbox="595 1015 1127 1044">▪ Promotion of rights of persons with disabilities <li data-bbox="595 1064 1127 1123">▪ Facilitation of disability workforce placement in private companies <li data-bbox="595 1142 1239 1201">▪ Entrepreneurship empowerment and training for persons with disability
Lao PDR	<ul style="list-style-type: none"> <li data-bbox="595 1211 1225 1299">▪ The Disability Law and draft National Policy on Persons with Disabilities promote the full participation of persons with disabilities in employment <li data-bbox="595 1319 1225 1456">▪ Asian Development with Disabled Persons (ADDP) is working collaboratively with the Association for Intellectual Disability on the project Improving Quality of Life and Vocational Training for Persons with Intellectual Disability between 2017-2019 <li data-bbox="595 1475 1239 1583">▪ Association for Autism (AfA) and VientianeAutism Centre (VAC) set up a vocational training unit under VAC to train students to plant sunflower sprouts, make key rings, painting, making postcards and sport.

Malaysia	<ul style="list-style-type: none"> ▪ Public Service Department ▪ Department of Social Welfare <ul style="list-style-type: none"> - Supported Employment through Job Coach Services <ul style="list-style-type: none"> ○ Paid Work ○ Continuous Support ○ Integration in the workshop - Job Matching and Placement System for Persons with Disabilities - Self-employment - Employment Incentive
Myanmar	<ul style="list-style-type: none"> ▪ Rights of the Persons with Disabilities law describes separate chapters for employment opportunities of persons with disabilities ▪ Promoting private sector for accessible workplaces ▪ Conducting advanced vocational training and pre-job training. ▪ Awareness-raising for interest and attention of the private sector on job placement for persons with disabilities. ▪ Conducting workshops for job opportunities with the Department of Labour and the private sector
Philippines	<ul style="list-style-type: none"> ▪ Autism groups team up with the local firms to give jobs to persons with autism spectrum

Singapore

- SG Enable
 - SG Enable Institutes of Higher Learning (IHL) Internship Programme
 - SG Enable RISE Mentorship Programme
 - SG Enable Job Shadowing Day
 - Job Placement Job Support (JPJS)
 - School-to-work Transition Programme
 - Workplace Disability Inclusive Index
 - Workfare Income Supplement Scheme (WIS)
 - Work Training Support Scheme (WTS)
 - Special Employment Credit (SEC)
 - Skill Future Study Awards (SFSA)
 - Open Door Programme (ODP)
 - Specialised employment services and supports for persons with autism by SSAs
 - Employability and Employment Centre
 - Professor Brawn Cafe
-

Thailand	<ul style="list-style-type: none"> ▪ Disability Inclusive Business (DIB) <ul style="list-style-type: none"> - Businesses run by persons with disabilities - Employment of person with disabilities in private sectors - Branding and development for products of persons with disabilities - Training and policies on Disability-Inclusive Business - Tax Incentive Related to Persons with Disabilities <ul style="list-style-type: none"> ○ Job payment for persons with disabilities ○ Expenses for providing equipment, facilities or service to employees with disabilities ○ Exempt for income tax ○ And other benefits ▪ Cooperation with the business sectors in the target community ▪ Public Policies on Disability-Inclusive Business by Persons with Disabilities Partnership with Business Sectors and Network System Management
Vietnam	<ul style="list-style-type: none"> ▪ Vocational supports and job making

4.5 Social Services

Persons with autism are different and have a unique set of strengths, interests, and abilities. However, they often have sensory sensitivities. Sometimes it can be hard to understand why people on the autism spectrum behave the way they do, and the best way to help is to be supportive and caring through social service programmes (Haney & Cullen, 2018). In South-East Asia countries, the programme of social services for persons with autism is financially support-oriented such as incentives and allowance. There are plenty of social service programmes that identify the strengths of persons with autism and overcome barriers with an aim to improve quality of life, increase independence and help people with autism reach their full potential. Table 4.4 shows the social service programmes provided by ASEAN countries.

Brunei Darussalam

Brunei Darussalam looks into strengthening the family institution as a key priority in helping to care for the vulnerable, including persons with autism, and has introduced various social security measures to ensure their accommodation, shelter and social participation needs are met. Examples of social service programmes that have been introduced are disability pension allowances, subsistence allowances, Old Age Pension, Zakat, Government Pension Scheme (GPS), and Employee Trust Fund (TAP). Most of the social service programmes are financial support for the persons with autism.

Cambodia

In Cambodia, the social service programmes for autism are provided by the Centre for Child and Adolescent Mental Health (CCAMH) in collaboration with the Ministry of Health. The example of social service programmes includes transportation and nutrition subsidy. The government promotes disability rights on current education policy to reduce discrimination against children with disabilities including autism. Non-profit organizations (NGOs) play a crucial role in training parents in caring for children with autism.

Indonesia

Social service programmes for persons with autism emphasize social support/assistance via the Hope Family Programme and social rehabilitation via social rehabilitation centres and social welfare institutions. There are three activities under social rehabilitation programme namely, (i) Targeted Assistance (Bantuan Bertujuan, BanTu), (ii) providing therapeutic services like physical therapy, mental and spiritual therapy, psychosocial therapy, life skills therapy, care (protection, support, personal care), family support programmes, and (iii) assistance by the institution to families with disabilities through home visits. Activities that can be carried out include family gatherings, family consultations, family tracing and reunification.

Lao PDR

Currently the state looks after people with disabilities from poor families registered with the Social Welfare Department.

Malaysia

Various agencies including government, private sectors, and non-profit organizations taking part in providing social service programmes for people with autism. For example, The Royal Malaysian Police (RMP) has launched its own Standard Operating Procedure (SOP) in handling persons with autism. Private companies like Gamuda initially started the Project Differently Abled in 2013 with the aim of providing gainful and sustainable employment for young adults with autism, and at the same time to cultivate open-minded and diversified work culture in the company. The same things are being done by McDonald's Malaysia via Ronald McDonald House Charities Malaysia, where they are providing in-house training and employment opportunities to persons with autism. State governments like Selangor take the initiative to provide a social service programme for persons with autism through the Early Intervention Programme (EIP). This programme is focusing on educational guidance and support to children at risk or having developmental delays which will affect their growth and learning abilities. The objective of this programme is to create awareness amongst parents, family members and society on developmental delays in children in the state of Selangor.

Myanmar

Social service programmes that are executed for people with autism in Myanmar are driven by the Myanmar National Social Protection Strategic Plan in 2014. The aim of the social service programme is to ensure persons with autism's needs, social inclusion, and access to services are met. Examples of programmes are disability allowance for persons with autism and their families. Support centres like OPSHG, Daycare Center, and home care are provided for persons with autism to get information services for persons with autism. The social service programme for adult with autism is a job placement programme where they are provided with vocational training.

Philippines

Daycare for children with autism aims at fully developing their potential to become independent, self-reliant, productive, and socially accepted members of society.

Singapore

The National Council of Social Service (NCSS) is the umbrella body for over 450 social service agencies in Singapore, which include disability agencies. The mission is to provide leadership and direction in social services programmes, enhance the capabilities of social services agencies, and provide strategic partnerships for an effective social services ecosystem. NCSS also plays a role in advocating for social service's needs, raising public awareness on related issues, as well as conducting research on vulnerable populations to inform policy and the planning of services. There are six social services programmes for people with autism namely, (i) social security and support for the needy programme through Provident Fund (CPF), ComCare Long-term Assistance Scheme, and ComCare Short-to-Medium Term Assistance Scheme, (ii) care and residential support programme, (iii) caregiver support, (iv) transport support, (v) Recreation, and (vi) Public Awareness Campaigns and others Notable Development programmes.

Thailand

Most of the social services programmes are implemented by government agencies with support from non-profit organizations. The main objective of the social services programmes executed is to strengthen and empower persons with disabilities including persons with autism through capacity building. There is a financial support programme for persons with autism through loan services for persons with autism including persons with autism and caregivers. The cooperation programme between government and private agencies is a priority to strengthen the social services programme for persons with autism in Thailand.

Vietnam

In Vietnam, the social services programmes for people with autism are executed by emphasizing the support system in the context of accessibility. For example, there are three (3) accessibility programmes for persons with autism namely (i) traffic and transport accessibility programme, (ii) construction of a disability-friendly building programme, and (iii) enhanced communication using IT programme for persons with disabilities including persons with autism. There is a social services programme that supports the recreational activities for persons with autism such as culture, sports, and tourism programmes.

Table 4.5: List of social services programmes provided by ASEAN countries

Country	Programme
Brunei Darussalam	<ul style="list-style-type: none"> ▪ Disability pension allowances ▪ Subsistence allowances ▪ Old Age Pension ▪ Zakat ▪ Government Pension Scheme (GPS) ▪ Employee Trust Fund (TAP)
Cambodia	<ul style="list-style-type: none"> ▪ Caritas-CCAMH provides transportation support for ID poor with autism ▪ Transportation and nutrition subsidy when needed ▪ Train parents about autism care methods ▪ Disability rights promotion and current education policies to reduce discrimination against children, especially children with autism
Indonesia	<ul style="list-style-type: none"> ▪ Advocacy and access to obtain KIS ▪ Hope Family Programme ▪ Social rehabilitation through social rehabilitation centers and social welfare institutions: <ul style="list-style-type: none"> - Bantuan Bertujuan (Intended Support) - Providing therapeutic services - Physical therapy - Mental therapy and spiritual therapy - Psychosocial therapy - Life skills therapy - Care (Protection, support, personal care) - Family support programme ▪ Assistance by the institution to families with disabilities through home visits
Lao PDR	<ul style="list-style-type: none"> ▪ Currently the state only looks after people with disabilities from poor families

Malaysia	<ul style="list-style-type: none"> ▪ Royal Malaysian Police ▪ Enabling Academy by Yayasan Gamuda ▪ McDonald's and Ronald McDonald House Charities Malaysia ▪ The initiative by State Government
Myanmar	<ul style="list-style-type: none"> ▪ Developing Myanmar National Social Protection Strategic Plan in 2014 ▪ Ensuring PWD needs, social inclusion, access to services for PWD ▪ Disability allowance will be provided to children with disabilities (0-18 yrs.) and families of children with disabilities (until 18 yrs.) ▪ workshops at center will be established (adult, OPSHG, Daycare Center, home care) ▪ Job placement (for those who complete vocational training)
Philippines	<ul style="list-style-type: none"> ▪ Daycare for children with autism aims at fully developing their potential towards becoming independent, self-reliant, productive, and socially accepted members of society.
Singapore	<ul style="list-style-type: none"> ▪ The general structure of Social Security and support for the needy <ul style="list-style-type: none"> - Provident Fund (CPF) - ComCare Long-term Assistance Scheme - ComCare Short-to-Medium Term Assistance Scheme ▪ Care and residential support <ul style="list-style-type: none"> - Sheltered workshops - Day activity Centres Programmes - Drop-In Disability Programme - Home Personal Care - Community Group Homes - Adult Disability Homes (ADH) - Adult Disability Hostels - Children-Disability Homes - Respite care - Eden for Life programme by Autism Association Singapore (AAS) - Connected Communities by Rainbow Centre

-
- Caregiver Support
 - Foreign Domestic Worker Grant and Lev Concession
 - Tax Reliefs for individuals supporting loved ones with disabilities
 - Special Needs Savings Trust Company (SNTC)
 - Caregivers Pod
 - Caregivers Training Grant
 - Autism Intervention, Training and Consultancy Service
 - Family Empowerment Programme by Rainbow Centre
 - Transport Support
 - Public Transport Concession
 - VWO Transport Subsidy Scheme (VWOTS)
 - Taxi Subsidy Scheme (TSS)
 - Recreation
 - Enrichment Programme by Autism Resource Centre (ARC)
 - Social Leisure Club (SLC) by AaRC
 - Eden Activity Club (EAC) by Autism Association Singapore (AAS)
 - Young Adult Activities (YAA)
 - Public Awareness Campaigns and other Notable Development
 - World Autism Awareness Day
 - A Very Special Walk
 - Purple Parade
 - Conversation @The Purple Parade
 - Training on disability awareness
 - The Asia Pacific Autism Conference 2019 (APAC19)
 - Look Beyond My Disability, See the True Me
-

Thailand	<ul style="list-style-type: none">▪ Strengthening capacity building and empowerment for persons with disabilities▪ Loan service for persons with disabilities and caregivers of persons with disabilities▪ Supporting projects on improving the quality of life of persons with disability▪ Cooperation with networks on disability and development
Vietnam	<ul style="list-style-type: none">▪ Traffic and transport means accessing support▪ Construction using and accessing support▪ Communication and IT using and accessing support▪ Persons with disabilities getting supports in activities of culture, sports, and tourism

CHALLENGES AND CONCLUSION

This chapter attempts to identify the various challenges faced by all ASEAN Member States at micro and macro level and propose ways to empower the stakeholders in autism-related communities. People with autism create significant challenges to policy-makers not only because of their increasing numbers but also because of the questions and debates surrounding how best to provide appropriate and effective solutions. In this section, nine (9) challenges have been proposed that could enhance the opportunities for persons with autism to be empowered in this unique region.

Diagnosis and Intervention for Persons with Autism

The detection and diagnosis of persons with autism is very important as many researches have shown the positive outcomes of early intervention after identification. The earlier identification is made, the better the outcome of development of a child as the primary purpose of identification is for the child to gain access to services (Charman & Stone, 2006). Interventions during early childhood and periodic monitoring aim to facilitate the optimal development and well-being of persons with autism (Shrivastava et al., 2016). However, early identification and intervention of persons with autism in Southeast Asia countries are the issues related to insufficient infrastructures, human resources, government policy and legislation, and financial support.

In most Southeast Asia countries, public health infrastructure for screening, early diagnosis, treatments, therapies and intervention programmes particularly in rural areas are lacking (Sankaranarayanan et al., 2001). Besides, there are a limited number of therapists in public health clinics to carry out early intervention. In some countries like Vietnam and Cambodia, the number of competent persons working on diagnosis and early intervention programme is critically insufficient. The cost of private education and intervention programmes including treatments and therapies in private centres is high and beyond the reach of the vast majority of Southeast Asia families (Sankaranarayanan et al., 2001). The cost of some early intervention treatments is far more expensive than other services received by infants and toddlers with other developmental delays.

There are a very limited autism-specific policies and legislation. This has an impact on the ability of autistic children and their families to access diagnosis and early intervention services in Southeast Asia countries. Parents have been confronted with the issue of how best to access the service delivery system for young children with autism (Boyd et al, 2010). Another challenge in diagnosis and early intervention of persons with autism is related to financial support (Boyd et al, 2010; Roberts & Prior, 2006). Even if there are some benefits for families with children with autism, the amount is not enough to cover the cost of early intervention services.

Family, Caregiver & Guardian Life Support

Autism spectrum disorder is a group of neurological dysfunctions ranging from hyperactivity to Asperger's syndrome, resulting in challenges in thinking, speaking, recognizing and expressing emotion, and social interactions (Centers for Disease Control and Prevention, 2012; Centers for Disease Control, 2012; Shorey, Ng, Haugan, & Law, 2019). Moreover, lack of understanding of early detection, sensory issues and home-based interventions by child care specialists can lead to major problems in later years for persons with autism.

There is a burden on caregivers concerning persons with autism. Some countries consider that changes in family structure, such as the increased participation of women in the labour market, globalized job market and the increase in divorce rates, brings more difficulties regarding care demands for persons with autism (Rahman et al., 2016; Shorey et al., 2019; Society, 2013; Speaks, It, & Listen, 2012). There is also a lack of family support services and in particular support for parents who are involved in caring for their adult children, and the absence of choice in terms of service provision could hamper the life of persons with autism.

Education and Vocational Services

Individuals with autism demonstrate a variety of symptoms within and across the diagnostic criteria, and therefore, each individual is unique in his or her specific symptoms, strengths, response to early intervention, and areas of need (Lord & Bishop 2015). This poses challenges to educators in providing educational programming for students with autism. Students with autism often present unique challenges to schools, and teachers can often find it difficult to meet their needs effectively. The challenges of persons with autism in Southeast Asia countries are placement issues, lack of competent teachers, and autism-specific education programmes and curriculum.

In most Southeast Asia countries, education services for children with autism are available in urban areas. There are very limited autism-specific education services in rural areas. Therefore, most of the parent of children with autism face difficulties with excessive anxiety and finding the right school in rural areas (Hastings & Brown, 2002).

Another challenge is lack of local skilled professionals and the availability of training programmes specific to persons with autism locally. This poses a challenge to produce more competent teachers who are able to provide services to students with autism in Southeast Asia. There is a serious absence of employment transition programmes to facilitate graduate persons with disabilities to enter the workforce (Bloom, 2010). There are limited accessible training courses to help persons with autism acquire the relevant skills and work experience to secure jobs as well as advance in their careers.

Level of Public Awareness

There is a need for adequate awareness of autism disorder. The reason for individuals not to be well informed is that family members of autistic children undergo great financial and mental burden and the less informed they are, the greater the risk of misdiagnoses, thus making their child more difficult and resistant to therapy (Anwar et al., 2018). The awareness for parents of persons with autism has increased gradually. However, increasing public awareness on autism is still the main challenges in Southeast Asia countries.

In some countries, awareness and education of the parents or guardians on the importance of early screening, diagnosis, detection for early intervention is considered low (Bush et al., 2015). This could be attributed to the denial syndrome of parents as well as fear of the stigma by society. Awareness and acceptance of society towards persons with autism as a whole is deemed not very positive. However, more parents with autistic children in Southeast Asia countries are now willing to share their life journeys through social media in an effort to boost understanding of the public on autism.

Employment for Persons with Autism

Unemployment rates in adults with autism vary across studies and countries, but they range from 30% to 75% (Jennes-Soussens et al, 2006). Those who find employment, however, are likely to be in unskilled jobs with low wages (Howlin et al, 2013). The absence of paid work, or regular activities, has been linked to deteriorating mental health and social exclusion

and poor quality of life (Billstedt et al, 2011). Indeed, finding a job is a daunting task for persons with autism. The challenges of employment for persons with autism in Southeast Asia countries are weak policy and legislation, employers are not ready to hire persons with autism, limited transition programmes to prepare persons with autism to enter the workforce.

Most of the countries in Southeast Asia have a persons with disabilities including persons with autism working policy. However, there are some issues in terms of implementation and execution of these policies at ground level that are causing limited job opportunities that are open to workers with disabilities (Kemshall, 2010). There is limited accessibility for workers with disabilities including persons with autism to carry out tasks given. Therefore, strengthening the policy and its implementation is crucial in Southeast Asia countries.

Another challenge is that persons with autism are not individually emotionally and mentally ready to enter the workforce. There are very limited transition programmes conducted by schools, government agencies and private agencies. Government and private agencies need to work together to come up with suitable transition programmes for persons with autism before they enter the workforce.

Facility for Persons with Autism

There is rising awareness in ASEAN countries of the difficulties faced by people with autism. Some countries such as Malaysia, Singapore and the Philippines are undertaking a landmark effort to reduce hurdles that keep away this group of people from public places and the facilities provided by the governments, local community, and NGOs. Facilities such as those in shopping complexes, government offices, parks, and recreational places. The biggest challenge is the stigma attached to the word 'autism' (Autism Speaks, 2016; Hossain et al., 2017; Society, 2013). Acceptance of this problem is lacking in society as well as in the members of the affected families. Moreover, lack of treatment facilities, training facilities and poor attention from the government are some of the major problems that a family with autism has to face.

Lack of Appropriate Data Management

Reports from various stakeholders in ASEAN countries identified several gaps in the availability of, and access to, services for persons with autism. They also identified the specific needs of persons with autism due to the lack of awareness or lack of competence

in autism among service providers, resulting in many persons with autism not reaching their full potential. Although the data are limited, evidence from the report suggests that because of the lack of appropriate data management, the following will occur:

Difficult to find a diagnosis easier

Difficult to lead more independent lives

More likely to have mental health difficulties

There is a lack of comprehensive information on the number of adults with autism to support service planning (Autism Speaks, 2019; Hossain et al., 2017; Speaks et al., 2012) and bites her mom each day as it rolls up to the bus stop. Jose will only eat three foods, and they can never touch each other on his plate or everybody is sorry. Sally hits herself in the head whenever someone tells her 'no.' Sometimes the difficulties of autism can lead to behaviors that are quite challenging for us to understand and address. Most individuals with autism will display challenging behaviors of some sort at some point in their lives. These behaviors can often be the result of the underlying conditions associated with autism. Autism spectrum disorders (ASD). The absence of information on services and entitlements are difficulties when engaging with many aspects of life such as seeking employment, housing and benefits. These are challenges that persons with autism encounter and need to be addressed properly.

Empowerment of Resources

Seminars and workshops are being conducted on this topic to create awareness among parents, professionals and government authorities. There is a need to create awareness about this disorder at the government level. There are some government funds for this particular problem. However, many non-government organizations and private institutions help people to access services at a very low cost.

Research and Development

Despite the fact that the greatest number of children with autism live in developing countries, little research has been explored (Durkin et al., 2015). Studies on important topics related to autism have mainly been conducted in developed countries and therefore provide an

incomplete view of the global impact of autism and the challenges facing this community worldwide.

There is a critical gap in research to describe the prevalence of autism across the globe. Proper studies involve the use of validated research tools for systematic clinical screening and diagnosis. Cost-of-illness studies are needed to help governments understand the true economic impact of autism in their country. There is also a lack of research to evaluate the effectiveness and cost-effectiveness of interventions delivered to children with autism. These types of studies are important for planning and advocacy purposes and developing provider and researcher training programmes and service provision.

There are several barriers to quality research related to autism (Sharan et al. 2007), including:

- No research agenda

- No link between research and policy

- Lack of research quality

- Underdeveloped research environments

- Lack of research networks between developed and developing countries.

5.2 Conclusion

Autism spectrum disorder (ASD) represents a group of lifelong neurodevelopmental disorders emerging during early childhood and interfering with a person's ability to socially relate to and interact with others. Autism is primarily a lifelong condition requiring a co-ordinated set of services across health, education and social sectors (Fein et al. 2013).

One significant recommendation towards the project is to have more comprehensive discussions on the vital roles of parents and caregivers of persons with autism on safeguarding and advocating for their child, as well as on how to promote organizations of and for persons with autism.

Some recommendations have been identified to ensure that persons with autism have a better quality of life, these are:

Recommendation 1: Provide Inclusive Education

Design more inclusive education systems, both to make schools more accessible to children with autism, and to modify instruction to meet the needs of all children.

Special technical vocational education and training (TVET) programmes to support persons with autism to acquire knowledge and skills necessary to find and retain decent work.

Train educators with special inclusive programmes to handle persons with autism and provide general education teachers with training on how to accommodate a child with a disorder or disability in their classroom.

Recommendation 2: Create Public Awareness

Launch public awareness campaigns and programmes to promote the rights of persons with autism and to challenge discriminatory attitudes surrounding disability.

Conduct awareness training for public employees at the national and local levels.

Recommendation 3: Develop Community Based Rehabilitation (CBR) Programmes

Governments and local communities and related stakeholders develop a community-based medical integration, equalization of opportunities, and physical therapy (physiotherapy) rehabilitation programmes for persons with autism.

Develop community-based rehabilitation programmes in rural areas.

Create special skill training for caregivers or parents of children with autism.

Provide support and information to families of those with autism on how to take care of their family members with autism.

Recommendation 4: Strengthen Research and Data Management

Conduct a national survey on persons with autism to improve the quality of data and understanding of barriers and in turn develop more responsive policies, regulations, and strategic plans.

Provide comprehensive data management systems for planning, monitoring and evaluating development programmes related to persons with autism.

Recommendation 5: Support Persons with Autism at Workplace

Promote flexible working arrangements to ensure that qualified, productive individuals are not unnecessarily prevented from doing certain jobs.

Develop job coach accreditation and training standards and provide job coaching services to enable persons with disabilities to do their jobs effectively and productively.

Recommendation 6: Enhance Health Care Capacity

Develop a health care system to provide training and education to all clinicians, while also developing additional specialized training programmes for targeted screenings and evaluations for persons with autism.

Provide quality diagnosis and intervention services to persons with autism.

Provide evidence-based therapies by providing additional training to parents, teachers, and clinicians.

Recommendation 7: Strengthen National Capacities in Caring for Children, Young People and Adults with Autism

The national strategies for persons with autism should ensure that the transition pathway for children with autism to young people with special needs and disabilities addresses the needs particularly those that will require support from adult services.



The Asia-Pacific Development Center on Disability (APCD) is a regional center on disability and development established in Bangkok, Thailand as a legacy of the Asia-Pacific Decade of Disabled Persons 1993-2002, with joint collaboration of the Ministry of Social Development and Human Security of the Royal Thai Government, Japan International Cooperation Agency and the Government of Japan. It is managed by the APCD Foundation under the Patronage of Her Royal Highness Princess Maha Chakri Sirindhorn.

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