### ABA Around the World...Dubai, UAE

Vincent J. Carbone, Ed.D., BCBA-D, LBA

Carbone Clinic

New York – Boston – London – Dubai

http://www.thecarboneclinic.ae/

National Autism Conference Penn Stater Conference Center Hotel State College, PA

July 31 - August 3, 2017

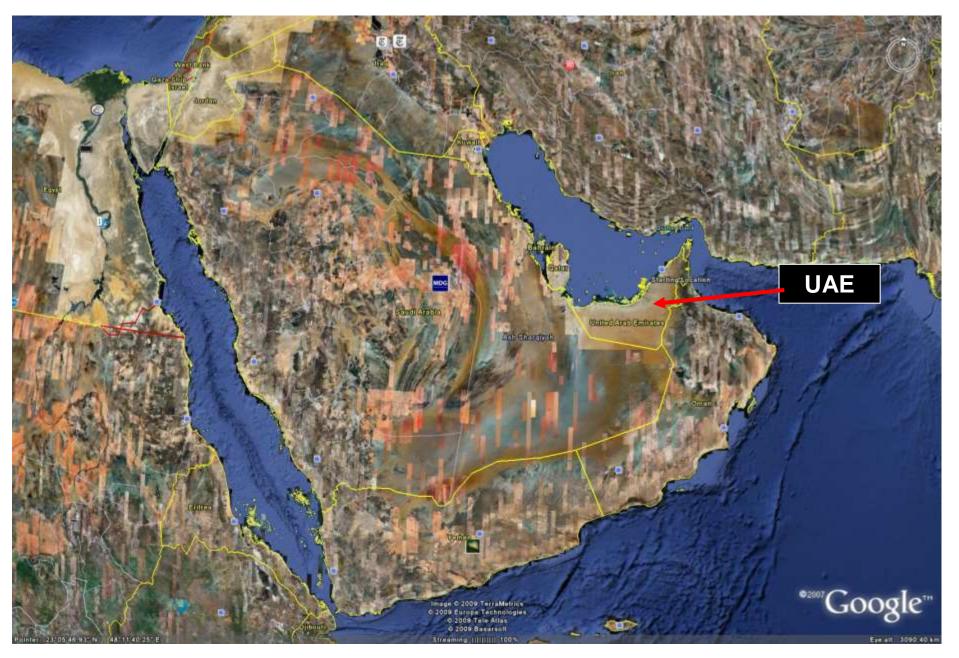
Some of the following slides are presented with permission from Dr. Michelle Kelly. They were part of a presentation by Sharifa Yateem, Mona Al Haddad, & Michelle P. Kelly

The Evolution of ABA in the Gulf Region:

United Arab Emirates, Kingdom of Bahrain, & Kingdom of Saudi Arabia

ABAI Minneapolis 2013





3

### **THE REGION**

#### ABA in the GCC

The Gulf Cooperation Council (GCC) was founded on 26th May 1981

Aim of GCC: promote coordination between member states in

all fields in order to achieve unity.

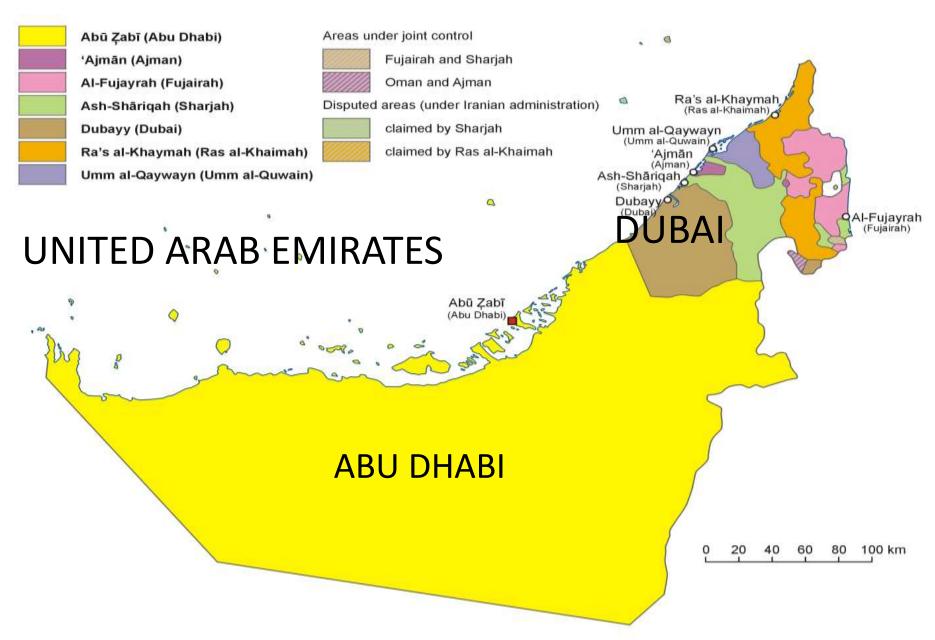
- GCC consists of:
  - 1. United Arab Emirates
  - 2.Bahrain
  - 3. Kingdom of Saudi Arabia
  - 4.Kuwait
  - 5.Qatar
  - 6. Sultanate of Oman

Presented with permission from Dr. Michelle Kelly



### UNITED ARAB EMIRATES (UAE)

- The UAE is a Gulf State on the Arabian peninsula
- Comprised of 7 Emirates, the largest of which are Abu Dhabi and Dubai
- The Federation was formed 37 years ago
- The UAE is a modern, developed country in most respects
- Population (2017): 8.5 Million People
   Only Approximately 1 Million are Nationals
   (source: United Arab Emirates national Bureau of statistics).



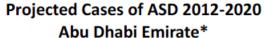
Presented with permission from Dr. Michelle Kelly

### Prevalence Estimate of ASD: Abu Dhabi Emirate and Al Ain Region (2012 - 2020)

The following projection for 2013 through 2020 is based on current population data from the 2012 Statistical Yearbook and an estimated population growth rate of 3%.

age	2012	2013	2014	2015	2016	2017	2018	2019	2020
0-14	1466	1477	1492	1512	1535	1558	1586	1618	1655

# Projected cases of ASD 2012- 2020 Abu Dhabi Reference: Dr. Daniel Gould (2012)



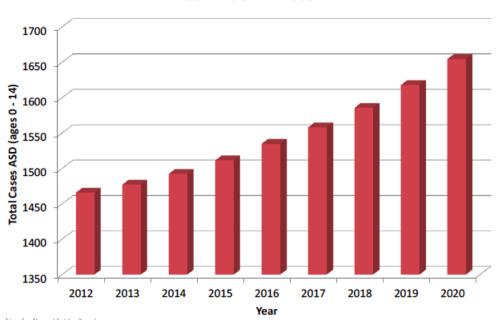


Table 1 The estimated population (from 2012) and prevalence rates for autism in each of the six member states of the Gulf Cooperation Council (GCC)

GCC state	Estimated population (in millions)	Published prevalence rate			
Kingdom of Bahrain	1.2	4.3 per 10,000 (Al-Ansari and Ahmed 2013)			
State of Kuwait	3.1				
Sultanate of Oman	3.3	1.4 per 10,000 (Al-Farsi, Al-Sharbati, Al-Farsi, Al-Shafaee, Brooks and Waly 2011)			
State of Qatar	2.7	-			
Kingdom of Saudi Arabia	28.4	-			
United Arab Emirates	83	29 per 10,000 (with a diagnosis of PDD) (Eapen, Mabrouk, Zoubeidi, and Yunis 2007)			

**United States** 

321

@ 147 per 10,000 or 1:68

# Number of Centers in GCC Advertising the Provision of ABA Services

United Arab Emirates - 24 in Dubai;

8 in Abu Dhabi

Saudi Arabia - 7

Kuwait - 3

Qatar- 3

Bahrain - 3

Oman - 1

## Board Certificants and Registrants in Dubai (May 2017)

- 11 BCaBAs
- 38 BCBAs
- 1 BCBA-D
- 127 RBTs



### The Carbone Clinic Location

- The Carbone Clinic is located in Dubai Healthcare City (DHCC) and was established in October, 2013.
- DHCC is a free economic zone established in 2002 to provide world class health services to local and regional residents.
- It attracts tourists to Dubai from the region for medical and health services.
- The clinic is regulated by CPQ (Center for Healthcare Planning and Quality) which conducts regular inspection visits.
- Dubai Healthcare City Authority recently established licensure regulations for Behavior Analysts in Dubai.





### **CLINIC OBJECTIVES**

- The plans for the Carbone Clinic Dubai was initiated by Sukhdev Hansra of Isthmus Partners.
- Along with Javier Cervino they are a group of financial consultants with an additional interest in entrepreneurship and new business start up.
- They came to NY to discuss replicating our model of ABA services to children with autism in Dubai.
- Isthmus Partners secured funding for the clinic through a group of local and foreign investors.
- Mazrui Holdings, LLC, of Abu Dhabi, is the largest investor in the Carbone Clinic - Dubai.

- We agreed that the Carbone Clinic-Dubai would be a social impact venture. Our objectives therefore include:
- 1. Provide quality services to children in the Middle East Region
- 2. Disseminate the application of ABA as a treatment for children with autism and establish ABA as the method of choice in the region.
- Train local behavior analysts and support their work towards Board Certification to insure a group of well trained individuals to sustain local efforts.
- 4. Establish a charity within the Carbone Clinic structure to support services to children in need.
- 5. Establish ABA as a recognized discipline within the government regulatory system.

### **STAFFING & FUNDING**

- We have grown slowly over the past 4 years.
- Currently enrolled approximately 25 full and parttime children ages 3-15, all receiving 1-1 services.
- The staff are of 13 different nationalities and the children are of 9 different nationalities
- Clinical Director, Lead BCBA (Cherine Basfer) and three supervisors.
- Staff include 6 BCBAs and one BCaBA
- Three staff prepared to sit for BCBA exam this summer

More than half the clinical staff have Master's degrees.

- We support further education by sponsoring Master's degrees for staff and completion of the BCBA course sequence.
- Most funding for services is through private pay by parents with some children sponsored by the Kingdom of Saudi Arabia and private benefactors.

### **SERVICES**

- All children receive 1-1 behavior analytic services in the clinic by supervised therapists.
- Following a comprehensive assessment a treatment plan is developed with parent involvement and implemented.
- Programming includes all domains relevant to children with autism including language, academic skills, activities of daily living, social skills, leisure activities, play skills, etc.
- Parents and care-givers in the home are provided training in home and clinic by BCBA level supervisors.
- Consultants provide training to educators in schools.

- All staff complete at least 25 hours of competency based training before working with children.
- Supervision by BCBA's is at ratio of no greater than 5 (FTE): 1.
- Treatment fidelity and therapist competency is assessed regularly by supervisors and monetary and social consequences are provided for exemplary performance monthly.
- Three to five day consultations/assessments are provided to children from the Middle East Region and overseas with follow up via remote access to the family and treatment team. We have conducted consults for families from Iraq, Kuwait, Egypt, Jordan, Malaysia, Pakistan, Lebanon, India and Uzbekistan, etc.

- A full time OutReach Consultant provides services to parents and educators in their respective environments.
- A part-time OutReach Consultant, Laura Ferguson, provides consultation services to a center based program in Germany and Saudi Arabia.
- The Jeddah Institute for Speech and Hearing (JISH) in Jeddah, Saudia Arabia, is a replication model of our center in Dubai having obtained our treatment and training model and on-going consultation by Laura Ferguson.



















VIDEOS 30

### The Future of ABA in Dubai and the UAE

### **CHALLENGES**

- The demand for services far outweighs the ability of current qualified staff to meet the need. This will continue to increase. (Kelly, et al., 2016)
- "With a severe deficit in local professionals trained in ABA, the provision of ABA services is significantly restricted within all GCC states." (Kelly, et al., 2016)
- This situation tends to attract persons of varying qualifications to establish autism treatment programs
- Licensing and regulating of behavior analysis services is necessary and beginning.
- Regulation of ABA services will need to rely on international standards set by the BACB to increase the number of qualified personnel.

31

- There is only one BCBA Approved Course Sequence currently available in the UAE and it has been discontinued as of 2019.
- An increase in local university training programs will be necessary to insure improved services.
- There is limited in-service training opportunities.
- There is a growing need for government funding of ABA services especially in public schools.
- There is a lack of fluent Arabic speaking BCBA's and therefore many children go unserved.

- Accurate prevalence studies are necessary to document the need and therefore encourage the funding and development of quality services.
- Research that demonstrates the effectiveness of ABA with children in the region will be necessary for the dissemination of the science (Malott, et al., 2003).

- Parent awareness of effectiveness of ABA as a treatment method is limited.
- There are currently no BCBA's in government positions
- Very few school programs provide ABA services to children with autism.
- Adults with autism receive very limited services.
- There is very limited third part reimbursement for ABA services.

### PROMISING ACTIVITIES

- There are some promising developments in the region.
   They are documented in a 2016 paper by Kelly, et al.
- The Middle East Association for Behavior Analysis (2002) and the United Arab Emirates ABA are active organizations disseminating useful information.
- The BACB fourth edition task list has been translated into Arabic. This is available on the BACB website
- Seminal papers and literature are also being translated
- Diagnostic materials and treatment related manuals are now appearing in Arabic.

- The BCBA announced that the credentialing exam would be available in Arabic in 2019.
- There is currently a Ministry of Education initiative "school for all" in UAE that requires educational services that meet international standards for all children with disabilities. (Kelly, et. al., 2016).