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## Special Education in Arab Countries: Current challenges

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Arab countries have undertaken various measures to develop special education programmes and services over the last three decades; nevertheless, major challenges remain regarding the expansion of these programmes and services and improving their quality. *This article provides an update on disability and special education in Arab countries.* Reflections on the historical development of special education in Arab societies are briefly presented. Major challenges currently faced by Arab countries in the field of special education are described, and some recommendations for action are offered.

**Keywords:** Arab region; Arab societies; challenges; developing countries; disability; Middle East and North Africa; special education; special needs

### Introduction

It is important to stress early on the tremendous diversity in Arab countries despite common culture, language, and religion, and physical and geographic environment. As Al-Krenawi, Graham, Dean, and Eltaiba (2004) note, “Arab societies are highly diverse and consist of heterogeneous systems of social differentiation based on ethnic, linguistic, sectarian, familial, tribal, regional, socioeconomic, and national identities” (p. 103). There are wide differences between these countries in terms of citizen rights, immigration and social integration, religion, culture, social norms, and civil conflict. These differences among Arab countries clearly impact social justice and the human rights movements, including the disability rights movement (Al Thani, 2006; Weber, 2012). No common strategy currently exists for special education in Arab countries; each country has adopted a spectrum of responses from segregation to varying levels of inclusion (Weber). In general, the situation of special education in Arab societies have been changing slowly for the better over the past 30 years. Both governmental and non-governmental agencies and organisations have become more active in protecting the rights of these persons, improving educational opportunities for them, promoting their independence and integration into their societies, and launching public awareness and education programmes with the primary purpose of protecting their rights and enhancing their living conditions. Furthermore, persons with disabilities (PWDs) have become more visible in public life, the language used to refer to these persons has become more appropriate, and perceptions of disability and special education in Arab societies have been gradually changing. However, shortcomings and problems in services persist (Al Thani, 2006; Ashencaen Crabtree & Williams, 2013; Weber, 2012).

The purpose of this article are to: (a) present the current challenges these countries face in the expansion of programmes and services and the improvement of their quality,

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and (b) offer some recommendations for action. The challenges addressed in this article are based on the perspectives of the authors, incorporating relevant literature. Having been involved with special education in Arab countries since the mid 1980s through pre-service and in-service training, academic writing and publishing, and consultations, the authors utilised their extensive experience in presenting current challenges to special education in Arab countries. In this article, the authors also consulted relevant studies. They searched the Education Resources Information Center and Google Scholar databases, and used popular search engines (Google, Yahoo, Bing, Netscape, and MSN) to identify the literature written in English on special education in Arab countries. Realising the limitations of online Arabic academic databases, the authors also used hand searching to find pertinent publications written in Arabic.

### **Disability in the Arab World: A Brief Overview**

The Arab world consists of 22 Arab countries located in the Middle East and North Africa where Arabic is the dominant language. These countries are: Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen. The total population of these countries in 2010 was 359 million (Mirkin, 2010).

An exact number of PWDs in the Arab region is not available; however, based upon international calculations which estimate disability prevalence rate in Arab countries at 15% of the total population, the World Health Organization [WHO] (2012) reported that over 53 million Arab PWDs. The majority of PWDs in Arab countries lack access to special education services.

Historically, PWDs have been considered burdensome and shameful in Arab societies (Al Lawati, 2011). Social attitudes toward disability are important since such attitudes have an impact on families of PWDs. These attitudes not only prevent these persons from getting appropriate services, but also make it very hard for them and their families to lead a normal life. Commonly, families in Arab societies are ashamed to acknowledge that their child has a disability. As a result, many PWDs are locked away in institutions or kept at home without receiving special education or related services (Al Lawati). However, recent research by Ashencaen Crabtree and Williams (2013) revealed changing perceptions towards disability and special education in Arab societies.

Services for PWDs emerged in a few Arab countries in the 1960s and in others in the 1980s or 1990s. Initially, centers or schools for individuals in four main disability categories (intellectual disabilities, hearing impairment, visual impairment, and physical disabilities) were established by members of the private and volunteer sectors. Many years later, governments became involved. Until the late 1970s, only on-the-job training was implemented, in which unspecialised teachers already working in special education schools and centers were provided with in-service training. Special education programmes and services for PWDs were based on compassion and charity work (Hadidi, 1998), perhaps explaining why ministries of social development instead of ministries of education have assumed responsibility for special education services for decades in most Arab countries.

In the early 1980s, teacher training in special education took a new direction, when some universities and community colleges offered a one-year or two-year diploma in special education. Shortly thereafter, some universities developed undergraduate or

graduate programmes, or both, in special education (Yousef, 1993). Since then, educational specialists in Arab countries have paid increasing attention to teacher training, research, tests, publications, seminars, and conferences related to disability. In addition, surveys of disability prevalence rates emerged in few Arab countries, national education authorities established special education departments, and new approaches to special education (e.g. resource rooms) evolved. These services, however, remained geared almost entirely to school-age students with blindness, deafness, physical disabilities, and intellectual disabilities. In the 1990s, special education services for students with learning disabilities and autism finally appeared. Students with other disabilities (e.g. speech and language disorders and behavior disorders) remained generally un-served.

Since 1990, most Arab countries enacted laws for the “care and rehabilitation” of PWDs and established special education centers and schools. With the release of the Salamanca Statement and Framework for Action on Special Needs Education (United Nations Educational, Scientific & Cultural Organization, 1994), Arab countries started reformulating their educational policies to promote the inclusion of an increasing number of students with special educational needs into mainstream schools. Nevertheless, most Arab countries continued to provide educational services to these students. The majority of Arab countries have ratified the UN Convention on the Rights of PWDs of 2006, which encouraged, among other things, ensuring an inclusive education (IE) system at all levels of education. Although many Arab countries had either established higher councils or modified existing laws to align them with the main principles of the Convention, judging how much influence this Convention will have on fostering the inclusion of PWDs into regular schools in Arab countries is difficult. Preliminary data have pointed to a quantitative instead of a qualitative change in inclusion practices (e.g. establishing more resource rooms, conducting more meetings and conferences, and publishing more articles). Despite heated discussions and repeated calls for the implementation of IE programmes, the primary model used in the provision of special education services in Arab countries is the segregation model, in which the majority of PWDs receive services in institutions separate from the public educational system.

In recent years, governments and civic organisations in Arab countries have shown increased interest in protecting the human rights of PWDs, exerting unprecedented effort pertinent to this issue. In addition, national special education laws, university programmes in special education, awareness-raising programmes, psychoeducational assessment tools, research, and media awareness have grown exponentially. Furthermore, PWDs have become more visible members of local communities, and their issues have become part of public life. However, these persons and their families are not active advocates for their rights because they are excluded from the information they need to stand up for their rights (Abu Alghaib, 2012).

### **Current Challenges and Suggested Actions**

Programmes and services for PWDs cannot be isolated from the political, socio-economic, and educational factors in society. Although recent years have seen significant economic growth in some Arab countries (e.g. the Gulf Cooperation Council which includes the Kingdom of Saudi Arabia, the United Arab Emirates, Qatar, Kuwait, Oman, and Bahrain), other Arab states remain mostly developing economies. Despite significant steps taken by Arab countries since the 1980s to improve the living conditions of PWDs, achieving notable progress in this field remains a challenge under prevailing political, economic, social, educational, and cultural barriers and constraints.

The WHO (2012) report, mentioned earlier, summarised the challenges facing Arab societies regarding disability and special education as follows:

The Arab region faces several challenges around disability, such as the variation in the definition of disability from one country to another; the lack of data and information on the different aspects of disability, domination of the concept of “care” in addressing the issue over the philosophy of inclusion; the discrepancy between the current level of political commitment with the magnitude of disability and the declared commitments; the gap in understanding how commitments are translated into action; the fragmentation of existing efforts and insufficient or ineffective coordination mechanisms within and between the concerned sectors. (p. 4)

The “Arab Spring” that swept the Arab region since late 2010 has thus far directly contributed to the marked increase in disabilities in those countries. At the same time, the provision of human services will likely be compromised. It has brought with it economic uncertainty and more difficult living conditions with the influx of refugees throughout the region and the subsequent draining of local resources. Such difficulties are expected to have a negative impact on the quality of life and the learning opportunities available to PWDs. Representatives of the Arab disability movement hoped that the Arab spring would be an occasion for a paradigm shift in dealing with disability and other social issues in the Arab world. According to Saif (2013), the Arab Spring which called for better living conditions has so far negatively impacted regional economies, especially in Tunisia, Egypt, Yemen, Libya, Syria, and some other countries. Taking the population growth into account, the postulated economic growth will be negligible; thus, further contributing to the deterioration in standards of living (Saif, 2013). However, it remains to be seen what, if any, influences the Arab spring would have on services for PWDs in these countries.

In this section, the major challenges currently faced by Arab countries in providing services for PWDs are presented.

### **Lack of Access to Services**

Despite significant efforts in the last three decades, Arab countries still face considerable challenges in providing appropriate special education services to PWDs. Parents and educational practitioners are aware of the very long waiting lists of people eligible for special education and related services in both segregated and inclusive settings. Most PWDs seeking special education and related services in Arab countries face difficulties in accessing these services. Special education services reach only a very small percentage of students with disabilities. Reasons include grossly inadequate special education and rehabilitation facilities, limited financial resources, lack of accessible educational curricula and materials, scarcity of IE programmes, lack of transportation, high cost of specialised services, social stigma, and school inaccessibility (Al Lawati, 2011; Kronfol, 2012; Wehbi, 2007). There is also a serious shortage of support personnel such as school psychologists, sign language interpreters, speech and language pathologists, physical and occupational therapists (Al Thani, 2006; Hadidi & Al Khateeb, 2013); and an absence of several special education service delivery models (e.g. self-contained classes, hospital-based instruction, consultant teachers, and itinerant teachers).

Major sources of special education funding in Arab countries are governments, voluntary bodies, international development agencies, parents, and non-governmental

organisations. Most private special education schools and centers in Arab countries have difficulties obtaining adequate funding (Bradshaw, Tennant, & Lydiatt, 2004). Limited funding for special education programmes in both rich and poor Arab countries generally reflect a lack of conviction in the usefulness of these programmes and a lack of understanding of the economics of special education. Services for students with disabilities in the Arab countries remain “relegated to the background because of the tremendous challenges imposed by economic hardship, political instability, illiteracy, lack of adequate primary health care, and other factors” (Hadidi, 1998, p. 535). The need is clear for awareness of the cost–benefit analysis of special education programmes, adoption of clear formulas for funding of special education programmes, and increased allocations for these programmes in line with the actual needs.

Further, there is a lack of effective regulatory and quality control of special education programmes and services (Bradshaw et al., 2004). Although the progress of students with disabilities is traditionally monitored in individualised education programmes, objective evaluation of the impact and effectiveness of special education programmes and services is rarely conducted in Arab countries. The end result is that policymakers and programme developers lack information about the appropriateness and effectiveness of the services provided. The appropriateness of programme supports and services also remains unknown. In addition, the outcomes of special education remain obscure, and educational practices based on opinion are expected to continue. Accordingly, the need for programme evaluation employing scientific research methods to measure the implementation and outcomes of special education services is clear.

### **Attitudes and Perceptions toward Disability and Special Education**

Despite a steady shift in attitudes toward PWDs in recent years, social stigma and *dehumanising perceptions* still prevail in Arab societies, where these persons are viewed as a heavy burden on families, caregivers, and society in general (Ashencaen Crabtree, 2007; Nagata, 2007a). Abu Alghaib (2012) recently commented, that the prevailing attitude amongst the wider public still remains that people with disabilities are a burden and should be hidden away. Ashencaen Crabtree observed that social stigma of disability negatively impacts both PWDs and their families in the Arab region. Relatively low expectations of PWDs are generally reflected in the poor quality of special education programmes and services as well as in the limited scientific evaluation of these programmes and services.

Widespread abuse and maltreatment of PWDs in some countries of the region, particularly of girls and women, still occur (Al Thani, 2006). The majority of studies conducted in Arab countries revealed a lack of awareness of disability issues and a widespread lack of awareness of the rights of PWDs among various groups, such as school teachers (Abdalla & St. Louis, 2012; Anati, 2012), senior-level administrators (Anati, 2012), the general public (Al-Hilawani, Koch, & Braaten, 2008; Al-Kindi, Al-Juhaishi, & Al-Saffar, 2012; Gobrial, 2012; Nagata, 2007b), and healthcare providers (Zeglam & Maouna, 2012). Thus, Arab countries must exert much more effort to increase public awareness of the capabilities and rights of PWDs, dispel misconceptions and nonscientific explanations of disability, challenge cultural representations of disability, and promote realistic attitudes.

### **Disability and Special Education Databases**

Another challenge to the advancement of special education in Arab countries is the absence of reliable data and accurate statistics on disabilities, which has led to considerable difficulties in making policy and settings priorities. Disability registry data are meager, and inadequacy of documentation and data maintenance are still very common in Arab countries (Al Thani, 2006; Weber, 2012; WHO, 2012). Similarly, adopting operational definitions and classification systems for disability is still a major challenge in Arab countries. No uniform set of definitions exists, and what is available is nothing more than widely varied translated definitions from foreign references. Accordingly, writing about disability and special education in the Arab region is a difficult task due to the noticeable lack of accurate and updated statistics, lack of indexed publications, and variability in terms and definitions (Al Thani, 2006; Gharaibeh, 2009; WHO, 2012). The lack of reliable data is evident in published national surveys in Arab countries, which estimate the prevalence rate of disability at around 1% of the total population. Compared to WHO prevalence rates of 15%, the data available about Arab PWDs seriously underestimate the prevalence of disability.

A recent report published by UN Enable (2013) about disability in Arab countries stressed the importance of improving disability data, information and statistics in the Arab region. Recognising the importance of reliable data on disability in supporting the formulation, monitoring and evaluation of evidence-based policies for disability-inclusive development in this part of the world, this report called for enhancing data and statistics on the situation of PWDs at national and regional levels. Further, the report encouraged Arab countries to adopt the International Classification of Functioning, Disability and Health (ICF) and establish a unified database on disability by including data and statistics on the situation of PWDs as part of mainstream socio-economic data collection and analysis.

General education laws as well as laws pertinent to PWDs do not include clear definitions of disability, special education, or related services. The need is clear for using agreed upon definitions to increase awareness of the number of PWDs and their needs. Also, improved methods of information gathering and statistics reporting should be developed. Fragmented and incomplete statistical data on the status and needs of PWDs and on services offered to them hinder the initiation and implementation of appropriate policies and programmes.

### **Disability and Special Education Laws and Policies**

As Abu Alghaib (2012) explains, the needs of PWDs are largely absent from public policy and national strategies. Further, there is a wide gap between announced policies and the actual situation on the ground. For example, the majority of children with disabilities receive special education services in segregated settings despite official adoption of IE. Also, PWDs are subjected to discrimination, prejudice, and negative attitudes despite regulations adopted to promote and protect their rights.

Arab countries, like many other developing countries (Kustaa, 1990), have tended to copy models of special education delivery used in developed countries such as the United States (Weber, 2012). Further, Arab countries have been influenced by the directives of the United Nations organisations with regard to PWDs. Most Arab countries currently have laws and policies that encourage the implementation of procedures to protect the rights of PWDs such as the right of to be integrated into community life, to

receive appropriate education, to be rehabilitated and employed, and to engage in sports and recreation. However, legislation and procedures are often not enforced and national committees which were established in Arab countries in recent years rarely follow up on the implementation of those laws and procedures.

Many items in disability and special education laws have been written in very general terms. They neither clearly identify the types of measures to be taken, nor do they specify practical mechanisms for the enforcement of those laws. This leads to varied interpretations and obscures follow-up and accountability mechanisms. Accordingly, clear explanations of items in these laws and regulations must be proposed. The apparent commitment of Arab governments to the protection of the human rights of PWDs must be translated into action to make tangible improvements in the lives of these persons and their families. In addition, vigorous accountability measures must be developed; otherwise, such laws and policies will remain empty slogans.

The medical model of disability continues to dominate disability legislation and policy in Arab countries (Al Jundi, 2013; Hagra, 2005). According to Al Jundi, the lack of clear and actionable legislation protecting the rights of PWDs is the most direct contributor to the prevalent negative social attitudes towards these persons in Arab countries. Al Jundi urges Arab countries to move from a medical/welfare model which perpetuates segregation to a social/human rights-based model (which encourages inclusion).

### Inclusive Education

A real challenge that has to be addressed is to make public services much more inclusive and more accessible to PWDs (Abu Alghaib, 2012). According to Weber (2012), IE is still in its early phases or sporadically available in Arab countries. Although there has been a growing trend in recent years towards the adoption of regulations and policies for creating barrier-free *accessible environments* for PWDs in many countries in the region (e.g. Kuwait, United Arab Emirates, Jordan, Saudi Arabia, and Qatar), significant *efforts are still needed* (Gharaibeh, 2009). For example, physical inaccessibility of Arab educational institutions remains a big challenge (Al Thani, 2006).

To a large extent, PWDs are not included in the regular mainstream education in the Arab region. Despite some recent efforts, educators face tremendous challenges in implementing effective IE (Alghazo & Naggar Gaad, 2004; Amr, 2011; Bradshaw, 2009; Gaad & Khan, 2007), and Arab schools remain inaccessible for PWDs (Al Thani, 2006; Wehbi, 2007). With the exception of resource rooms or special classes established in public schools, special education and services and programmes in Arab countries are still largely institution-based. What Arab countries really have is the initial stages of the “integration” model, which was common in developed countries before the 1970s. Of the many justifications offered for the non-implementation of IE are the following: large class size; inaccessibility of most school buildings; and negative attitudes from teachers, students, and parents. Thus, challenges to the design and implementation of inclusion programmes must be identified and addressed appropriately.

Recently, Al Khateeb, Hadidi, and Al Khateeb (2014) conducted a systematic review of IE research in Arab countries. The results indicated that most research was published in the last seven years and carried out in three of these countries: Jordan, Saudi Arabia, and United Arab Emirates. All studies reviewed used the survey methodology; none was experimental. IE research in Arab countries addressed three main topics: (a) attitudes toward IE, (b) outcomes of IE programmes, and (c) barriers to

IE. The results of studies investigating attitudes toward IE in Arab countries showed that teachers' attitudes toward IE were mixed. While many studies revealed that educators' attitudes toward IE were generally neutral to negative especially concerning the inclusion of children with disabilities, other studies indicated positive attitudes especially for children with mild disabilities in Arab countries. Studies reporting positive attitudes toward IE for children with disabilities also reported that IE posed numerous challenges to teachers due to limited training, lack of qualified practitioners, and lack of support. Studies indicated that main barriers indicated to IE in Arab countries were inaccessible buildings, crowded classrooms, lack of educational materials and supportive devices, rigid and inflexible curricula, inadequate training of teachers, non-inclusive policies (inappropriate learning environment, poor student progress; and poor support from school administrators and teachers). Most studies examining the outcomes of IE reported better academic and social development of children with disabilities in regular schools, and parents and children were generally satisfied with inclusion experience.

### Teacher Training

Shortcomings still permeate most aspects of special education teacher training at both the pre-service and in-service levels (Al-Hilawani et al., 2008; Amr, 2011; Bradshaw et al., 2004). With few exceptions, teacher education programmes in special education in Arab countries are not based on a set of professional standards for practice (such as the collaborative approach, continuous professional development, and evaluation of teacher education programmes). Arab countries should move beyond the general special education track and develop a system for teacher licensing. Furthermore, training programmes at all college levels should include more emphasis on practical experience (Al Jabery & Al Khamra, 2013), observance of professional standards to ensure that quality programmes are promoted, and a shift from a segregation model to an inclusion-oriented model (Anati, 2012). Also, the skills of special education teachers should be upgraded by in-service training programmes and regular teacher training programmes should include elements related to serving students with disabilities to facilitate IE.

### Early Intervention

The shortage of early intervention programmes in Arab countries is obvious (Al-Hilawani et al., 2008; Bradshaw et al., 2004). Late identification and delayed referral of at-risk children represent a major barrier. However, the widely known home-based early intervention model, the Portage Project, was introduced to the Arab world in 1984 in the Gaza strip, Palestine. The Portage materials were translated into Arabic and hundreds of home visitors were trained. Starting in the early 1990s, many other Arab countries (e.g. Egypt, Yemen, Saudi Arabia, Lebanon, Jordan, United Arab Emirates, Oman, Qatar, Bahrain, Morocco, & Kuwait) began to implement this Project (United Nations Educational, Scientific & Cultural Organization, 2007). More recently, other early intervention models such as the Early Start Denver Model for evidence-based early intervention services for children with autism (Elder, 2012) have been introduced into the Arab region, particularly the Arab Gulf countries (i.e. Saudi Arabia, Qatar, Kuwait, United Arab Emirates, Oman, and Bahrain).

Early childhood special education for 3- to 6-year-old children began to emerge in the early 1990 in some Arab countries. Before that time, local policies restricted special education services to children aged 6–15 years. Even today, many Arab countries still

have no clear policies or regulations regarding special education provision for preschool children with disabilities and children under 3 years of age remain largely un-served. Very little has been done in Arab countries to develop the capabilities of kindergarten staff with regard to early identification and intervention services for young children with disabilities. In regular education settings, programmes and services are primarily geared toward children in Grades 2–4 and sometimes to Grade 6. If children do not make progress, their parents must reach out for services in special education settings. Furthermore, although family-oriented early intervention involving such programmes as the Portage have been used in some Arab countries for more than 25 years, early intervention programmes remain very limited. Because of social and cultural factors, parents generally tend to wait and hope that their children will somehow outgrow their difficulties (Al Khateeb & Hadidi, 2010). That might explain why Arab parents are more interested in medically oriented rather than developmentally oriented intervention.

### **Transition Services**

Procedures and policies related to transition services have not developed yet in Arab countries (Obaid, 2012). In general, special education service providers in these countries do not have systematic and planned approaches for implementing transition services, and such services are not yet considered an integral part of special education. Accordingly, the special education support provided to PWDs does not prepare them to make a healthy transition to the real world. Almujael (2006) asserts that transition services in Saudi Arabia, which mirror the situation in many of the Arab countries are not currently addressed in special education programmes. Alnahdi (2013) explored attitudes and perceptions of 369 teachers toward transition services for students with mild intellectual disability in Saudi Arabia. The results revealed that overall, teachers held positive attitudes toward transition services. However, teachers reported they felt unprepared to provide transition services. Further, teachers suggested that transition services should be offered by professional staff rather than by teachers themselves and that including transition planning in students' individualised educational programmes would mean extra work and unnecessary burdens for teachers. Althabet (2002) reported that there were no courses related to transition services in special education teacher preparation programmes in Saudi Arabia. To the best knowledge of the authors, this also holds true for most, if not all, Arab universities.

### **Parental Involvement**

Current special education laws and training programmes in Arab countries give little attention to families and parents of children with disabilities. Although some parents actively participate in their children's educational programmes (Al-Shammari & Yawkey, 2008), parent involvement in special education is generally minimal and subject to the judgments and conditions of teachers and parents (Al-Shammari, 2000). Little or no efforts are made to raise the awareness of parents of the rights of their children with disabilities or to encourage teachers to facilitate their participation in the educational process (Sartawi & Smadi, 1997; Yousef & Hadidi, 1992). Thus, there should be concerted efforts to encourage parental involvement in special education programmes.

### Scientific Research on Disability and Special Education

In a recent study, Al Khateeb (2010) reviewed Arab special education research published in the last decade. A review of a total of 216 theses and journal studies showed that the relationship between research and practice in the field of special education in Arab countries is very poor and the potential of applying the findings of this research in the field is limited. Furthermore, many of these studies suffered from a number of systemic errors that limit their usefulness and place restrictions on the possibility of deploying them in the field. Furthermore, the research-practice gap is another major problem faced by Arab countries in the field of special education. Al Ghain and Abdulwahab (n.d.) identified several obstacles to research on disability in Saudi Arabia. These include, but are not limited to: the complete lack of appropriate epidemiological research, much of the research that has been conducted consists of surveys, scarcity of research on intervention programmes for PWDs, and poor data collection and data analysis. The UN Enable (2013) report, mentioned earlier, encouraged Arab countries to strengthen scientific research concerning disability. Specifically, this report emphasised the importance of allocating sufficient financial and human resources by governments, academic institutions and other stakeholders to support scientific research on different aspects of disability in these countries.

There is a noticeable lack of Arab local and regional centers concerned with disability research. Research in this field is mainly supported by deanships of academic research in Arab universities, traditionally with limited budgets. An exception is Prince Salman Center for Disability Research in Riyadh, Saudi Arabia. Established in 1990, this center has made significant achievements over the last two decades in early identification and intervention, disability prevention, instructional programmes for children with learning disabilities, accessibility, and dissemination of disability and rehabilitation information.

### Conclusions

This article has provided an analysis of the current challenges faced by Arab countries in providing services for PWDs. A major challenge is the lack of access to services due to inadequate special education facilities, limited financial resources, scarcity of IE programmes, lack of transportation, high cost of specialised services, social stigma, and school inaccessibility. Negative social attitudes associated with lack of knowledge of the needs and potential of PWDs represent a major barrier to appropriate disability programmes and services in the Arab region. These factors combined present barriers to the adjustment of these persons and their families, significantly impede their inclusion, and have adverse effects on the quality of programmes and services provided to them. Another conclusion entails addressing poor student outcomes in special education programmes and initiating effective IE approaches. Without effective early intervention programmes, transition services, and family involvement, PWDs will not achieve their maximum potential. Another major challenge relates to the extremely limited resources on disability and special programmes and services in Arab countries. Improving disability information resources and thinking about ways to develop comprehensive disability databases by systematically collecting data will allow for more rigorous analysis of disability related issues in the future. Other challenges identified in this article were monitoring the implementation of disability related laws and procedures, incorporating gender considerations in disability programmes and services, improving

psycho-educational assessment of PWDs, overcoming shortcomings in special and regular education teacher training at both the pre-service and in-service levels, and increasing allocations for disability programmes and services.

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### References

- Abdalla, F., & St. Louis, K. O. (2012). Arab school teachers' knowledge, beliefs and reactions regarding stuttering. *Journal of Fluency Disorders*, 37, 54–69.
- Abu Alghaib, O. (2012). *The disability rights movement in the Middle East needs an Arab Spring*. Retrieved from [www.handicap-international.org.uk/.../disability.../middl](http://www.handicap-international.org.uk/.../disability.../middl)
- Al Ghain, S., & Abdulwahab, S. (n.d). *Issues and obstacles in disability research in Saudi Arabia*. Retrieved from [www.aifo.it/english/disability/apdrj/apdrj102/arabia.pdf](http://www.aifo.it/english/disability/apdrj/apdrj102/arabia.pdf)
- Alghazo, E., & Naggat Gaad, E. (2004). General education teachers in the United Arab Emirates and their acceptance of the inclusion of students with disabilities. *British Journal of Special Education*, 31, 94–99.
- Al-Hilawani, Y. A., Koch, K. R., & Braaten, S. R. (2008). Enhancing services for students with mild disabilities in the Middle East Gulf region: A Kuwait initiative. *Teaching Exceptional Children Plus*, 4, 2–13.
- Al Jabery, M. A., & Al Khamra, H. A. (2013). Special education practicum at the university of Jordan: Preliminary indicators of students' satisfaction and concerns. *International Journal of Special Education*, 28, 129–140.
- Al Jundi, S. Z. (2013). *Human rights-based approach to disability in the Arab states*. Global Arab Network. Retrieved from [www.english.globalarabnetwork.com/..how-to-build-rights-respecting](http://www.english.globalarabnetwork.com/..how-to-build-rights-respecting)
- Al Khateeb, J. (2010). Arab Special education research (1998–2007). *Jordan Journal in Educational Sciences*, 6, 285–302.
- Al Khateeb, J., & Hadidi, M. (2010). *Moqaddema fi attadakhol al mobakker* [An introduction to early intervention]. Amman: Dar Alfikr.
- Al Khateeb, J., Hadidi, M., & Al Khateeb, A. (2014). *Inclusion of children with special educational needs in Arab countries: A review of the research literature from 1992 to 2012*. Manuscript submitted for publication.
- Al-Kindi, S. G., Al-Juhaishi, T., & Al-Saffar, A. J. (2012). Community attitudes towards people with down's syndrome: A sample from Iraq. *Public Health Research*, 2, 102–105.
- Al-Krenawi, A., Graham, J. R., Dean, Y. Z., & Eltaiba, N. (2004). Cross-national study of attitudes towards seeking professional help: Jordan, United Arab Emirates (UAE) and Arabs in Israel. *International Journal of Social Psychiatry*, 50, 102–114.
- Al Lawati, S. (2011). *Mentally disabled children in the Middle East and their integration into society*. Middle East Health. Retrieved from [www.middleeasthealthmag.com/jul2011/feature5.ht](http://www.middleeasthealthmag.com/jul2011/feature5.ht)
- Almuaqel, I. A. (2006). *Perceptions of parents, special education teachers, and rehabilitation counselors of the individualized transitional plan (ITP) for students with cognitive delay*. (Doctoral dissertation). Retrieved from [books.google.com.sa/books/about/Perceptionsof](http://books.google.com.sa/books/about/Perceptionsof)
- Alnahdi, G. (2013). Transition services for students with mild intellectual disability in Saudi Arabia. *Education and Training in Autism and Developmental Disabilities*, 48, 531–544.
- Al-Shammari, T. (2000). *Barriers to family involvement in educational services for children with disabilities*. College of Education Research Center, King Saud University, Riyadh. Retrieved from [www.educationrc.ksu.edu.sa/content/thesespubbyus2929](http://www.educationrc.ksu.edu.sa/content/thesespubbyus2929)

- Al-Shammari, Z., & Yawkey, T. D. (2008). Extent of parental involvement in improving the students' levels in special education: Programs in Kuwait. *Journal of Instructional Psychology*, 35, 140–150.
- Althabet, I. N. (2002). *Perceptions of teachers of mental retardation regarding their preparation program at King Saud University in Saudi Arabia* (Doctoral dissertation). University of South Florida, Tampa.
- Al Thani, H. (2006). Disability in the Arab region: Current situation and prospects. *Journal for Disability and International Development*, 3, 4–9. Retrieved from [direct.bl.uk/research/39/56/RN212261474.html](http://direct.bl.uk/research/39/56/RN212261474.html)
- Amr, M. (2011). Teacher education for inclusive education in the Arab world: The case of Jordan. *Prospects*, 41, 399–413.
- Anati, N. (2012). Including students with disabilities in UAE schools: A descriptive study. *International Journal of Special Education*, 27, 75–85.
- Ashencaen Crabtree, S. (2007). Family responses to the social inclusion of children with developmental disabilities in the United Arab Emirates. *Disability & Society*, 22, 49–62.
- Ashencaen Crabtree, S., & Williams, R. (2013). Ethical implications for research into inclusive education in Arab societies: Reflections on the politicization of the personalized research experience. *International Social Work*, 56, 148–161.
- Bradshaw, K. (2009). Teachers' attitudes and concerns towards integrating students with special needs in regular classrooms: A United Arab Emirates perspective. *Journal of the International Association of Special Education*, 10, 49–55.
- Bradshaw, K., Tennant, L., & Lydiatt, S. (2004). Special education in the United Arab Emirates: Anxieties, attitudes and aspirations. *International Journal of Special Education*, 19, 49–55.
- Elder, L. (2012). *Early intervention comes to Saudi Arabia*. Retrieved from [www.autismspeaks.org/blog/2012/.../early-intervention-comes-saudi-ara](http://www.autismspeaks.org/blog/2012/.../early-intervention-comes-saudi-ara)
- Gaad, E., & Khan, L. (2007). Primary mainstream teachers' attitudes towards inclusion of students with special educational needs in the private sector: A perspective from Dubai. *International Journal of Special Education*, 22, 95–102.
- Gharaibeh, N. (2009). Disability in Arab societies. In C. Marshall, E. Kendall, M. Gover, & M. E. Banks (Eds.), *Disabilities: Insights from across fields and around the world* (pp. 63–79). Santa Barbara, CA: Praeger.
- Gobrial, E. (2012). Mind the gap: The human rights of children with intellectual disabilities in Egypt. *Journal of Intellectual Disability Research*, 56, 1058–1064.
- Hadidi, M. S. (1998). Educational services for visually impaired children in the Arab countries. *Journal of Visual Impairment & Blindness*, 92, 535–538.
- Hadidi, M., & Al Khateeb, J. (2013). *Istrategiat taaleem attalaba Dar Alfikrthawee al hajat alkhasa* [Instructional strategies for students with special needs]. Amman: Dar Alfikr.
- Hagras, H. (2005). Definitions of disability and disability policy in Egypt. In C. Barnes & G. Mercer (Eds.), *The social model of disability: Europe and the majority world* (pp. 148–162). Leeds: The Disability Press.
- Kronfol, N. M. (2012). Health services to groups with special needs in the Arab world: A review. *Eastern Mediterranean Health Journal*, 18, 1247–1253.
- Kustaa, F. F. (1990). *Special education in developing countries: The dilemma of public policy making in the context of cultural exchanges and diffusion of innovations*. ERIC (ED 365046). Retrieved from [www.eric.ed.gov/?id=ED365046](http://www.eric.ed.gov/?id=ED365046)
- Mirkin, B. (2010). *Population levels, trends and policies in the Arab region: Challenges and opportunities*. United Nations Development Program, Arab Human Development Report, Research Paper Series. Retrieved from <http://www.arab-hdr.org/publications/other/ahdrps/paper01-en.pdf>
- Nagata, K. K. (2007a). The measurement of the Hong Kong-based 'baseline survey of students' attitudes toward people with a disability': Cross-cultural validation in Lebanon. *International Journal of Rehabilitation Research*, 30, 239–241.
- Nagata, K. K. (2007b). The scale of attitudes towards disabled persons (SADP): Cross-cultural validation in a middle income Arab country, Jordan. *The Review of Disability Studies*, 3, 4–9.
- Obaid, M. Z. (2012). *An evaluation of transition services for persons with intellectual disabilities in Jordan* (Master's thesis). University of Jordan, Amman.
- Saif, I. (2013). *Arab economies in transition: Limited room for optimism*. Retrieved from [www.carnegie-mec.org/2013/01/04/arab-economies-in-transition](http://www.carnegie-mec.org/2013/01/04/arab-economies-in-transition)

- Sartawi, A., & Smadi, A. A. (1997). Surveying the counselling needs of families with disablement in the United Arab Emirates. *International Journal of Rehabilitation Research*, 20, 329–334.
- UN Enable. (2013). *Report of the Arab regional consultation on disability and development*. Retrieved from [www.un.org/disabilities/documents/hlmdd/hlmdd\\_regional\\_report\\_arab.doc-36k](http://www.un.org/disabilities/documents/hlmdd/hlmdd_regional_report_arab.doc-36k)
- United Nations Educational, Scientific and Cultural Organization. (1994). *The UNESCO Salamanca Statement*. Retrieved from [www.unesco.org/education/pdf/SALAMA\\_E.PDF](http://www.unesco.org/education/pdf/SALAMA_E.PDF)
- United Nations Educational, Scientific and Cultural Organization. (2007). The Portage Project in the Arab world. Retrieved from [www.unesco.org/.../The%20portage%20project%20-GA](http://www.unesco.org/.../The%20portage%20project%20-GA)
- Weber, A. S. (2012). Inclusive education in the Gulf Cooperation Council. *Journal of Educational and Instructional Studies in the World*, 2, 85–96.
- Wehbi, S. (2007). Barriers to education for people with disabilities in Bekaa, Lebanon. *The Review of Disability Studies*, 3, 10–22.
- World Health Organization. (2012). *Summary report on the first stakeholders' meeting for developing an Arab report on disability*. Retrieved from [applications.emro.who.int/docs/IC\\_Meet\\_Rep\\_2013\\_EN\\_14926.pdf](http://applications.emro.who.int/docs/IC_Meet_Rep_2013_EN_14926.pdf)
- Yousef, J., & Hadidi, M. (1992). Families of children with disabilities in Jordan. *International Journal of Disability, Development and Education*, 39, 127–134.
- Yousef, J. M. (1993). Education of children with mental retardation in the Arab countries. *Mental Retardation*, 31, 117–121.
- Zeglam, A. M., & Maouna, A. (2012). Is there a need for a focused health care service for children with autistic spectrum disorders? A keyhole look at this problem in Tripoli, Libya. *Autism*, 16, 337–339.