

NATIONAL REHABILITATION PRIORITIES IN JORDAN









National Rehabilitation Priorities in Jordan

Needs Assessment Report
Work Package 1



JUST-CRS Master Program is funded by an EU Erasmus Plus Grant, The project is entitled "Esablishment of an interdisciplinary Clinical rehabilitation sciences master program at JUST JUST-CRS)"

Project Reference Number "573758-EPP-1-2016-1-JO-EPPKA2-CBHE-JP"





THE ESTABLISHMENT OF THE NATIONAL REHABILITATION PRIORITIES IN JORDAN

BACKGROUND:

In the Middle East, and particularly in Jordan, there is a great need in Jordan and in the Middle East for highly qualified professionals in rehabilitation sciences. This need is aggregated as the number of individuals with disabilities is on massive increase because of the civil wars in the neighbouring countries and the continuing flows of traumatized refugees. Jordan is unique country in the Middle East given its location and history of stability within the region. However, its position adds extra pressure on the health care delivery system in the country, which is one top priority in Jordan.

Higher education in rehabilitation sciences is almost lacking in the region while at the same time the number of bachelor degree graduates is increasing. Additionally, there is a widening gap between the products of higher education institutions in this field and the skills sets and competencies demanded by the job market. The field is also fragmented between different disciplines that are not used to cooperate in teams (i.e. there is a lack of multidisciplinary team concept). Recognizing this need, the department of rehabilitation sciences within Jordan University of Science and Technology has planned to develop a master program in rehabilitation sciences. Clinical Rehabilitation Sciences master program (JUST-CRS) is European funded project that targets establishment of an interdisciplinary master program in rehabilitation sciences in Jordan University of Science and Technology (JUST). The program is interdisciplinary as it targets both graduates of occupational and physical therapy.

Before establishing such program, a situation analysis is warrented to establish a solid ground on the current status quo of rehabilitation professions and services. This can provide tremendous insights on the proper objectives of this newly prospective and highly anticipated master program. Therefore, the aim of this report was to provide national rehabilitation priorities in Jordan to aid the development of the JUST-CRS program need assessment of academic, research and clinical skills of Jordan and the region. In preparation to develop the program, national rehabilitation priorities in Jordan was firstly determined by 1) consultation with the local (i.e. Jordanian) consortium members and 2) consultation with main rehabilitation stakeholders in Jordan.





This report will be structured in four main sections: The first section provides a brief background about the history of rehabilitation education and services in Jordan as well as its current situation. The second section outlines the process that was undertaken to establish the need assessment, while the third section highlights the main findings. The forth section provides the recommendations of the project consortium for what it constitutes of the "national priorities of rehabilitation education in Jordan" based on the data that was obtained from the need assessment process.

1 CURRENT SITUATION: PREVIEW OF THE REHABILITATION EDUCATION AND SERVICES IN JORDAN

Jordan has a total population of 9,559,000, according to 2015 statistics.¹ It is classified as a country of "high human development" with an "upper middle income" economy. It is considered one of the leading countries in rehabilitation in the Arab world. The increased number of disabilities as a result of chronic diseases, epidemics of poliomyelitis, traumas and wars in the region increased the need to establish rehabilitation services in Jordan. According to the statistics of the World Bank the percentage of disabled people in Jordan ranges between 4-5% of the population, while the World Health Organization (WHO) estimates the percentage of disabled people in Jordan at 8-10% of the population. Numbers increased to 13% of the community according to higher council of people with disability.² These differences in percentage are mostly related to disability definition.³

The rehabilitation services in Jordan currently are provided by departments of rehabilitation medicine at both the Royal Medical Services and at the Ministry of Health hospitals- which cover all the 12 governorates of the country- in addition to the 2 university hospitals in Jordan; Jordan University Hospital in Amman and King Abdullah University Hospital in Irbid, as well as some private hospitals and rehabilitation centres and clinics in the country. All these sectors are governed by ministry of health.

Table 1 provides a history about the milestones of the development of the rehabilitation services and the rehabilitation education in Jordan. The history of the rehabilitation education in Jordan goes back to 1973 in which the Ministry of Health started a diploma program in physical therapy at the Faculty of Allied Health and the Health Royal Services College to deliver the health sector in Jordan with physiotherapy and occupational therapy assistants. It was only till 1999 when 3 public universities in Jordan established 4-year bachelor degree programs in physical therapy and occupational therapy. These included, the University of Jordan, along with the Jordan University of Science and





Technology and the Hashemite University. The students study specific subjects both theoretical and practical courses related mainly to their specialty in order to graduate with enough experience to be effective members in the professional field. Hundreds of qualified physical and occupational therapists, orthotists and prosthetists, and speech and language therapists have been graduated. The 3 universities have sent their distinguished graduates to pursue their master and PhD postgraduate studies in various fields of physical, occupational, orthotics and prosthetics, and speech and language pathologies from well-known universities in the United States, UK and Europe.

	Table 1: the rehabilitation services and education in Jordan
Year	A. The milestones of the development of the rehabilitation services and education in Jordan Milestone
1964	UNRWA recruited Egyptians physiotherapists to treat children with disabilities in Palestinians refugee camps
1965	Two British physiotherapists established the first center in Amman
1965	Royal Medical Services sent two scholar for 6 months training program to UK
1968	An orthotic- prosthetic unit was opened at one of the hospitals of the Royal Medical Services
1973	The Ministry of Health started a 3 year diploma program in physical therapy training at the Faculty of Allied Health
1983	The 1st specialized rehabilitation centre was opened (Farah Royal Rehabilitation Centre)
1984	The National Training Institute of Prosthetics and Orthotics was opened as a collaborative effort between the Royal Medical Services, the Ministry of Health, and the German institute GTZ
1993	The first occupational therapy unit was opened at Farah Royal Rehabilitation Centre
1993	The development of Community Based Rehabilitation programs by the Rehabilitation Medicine Department at the Ministry of Health
1996	The orthotic- prosthetic services expanded to other peripheral hospitals, Prince Rashid in the north and Prince Ali hospital in the south
1999	The establishment of the first bachelor degree programs in occupational therapy and physical therapy in 3 governmental universities
2007	The establishment of the Higher Council for Affairs of People with Disabilities

2 NEEDS ASSESSMENT METHODOLOGY

This section describes the range of methods used to collect data for the purposes of this project. Both quantitative and qualitative approaches were used. The data sources that were used included:

- a. A survey with officials and therapists
- b. A survey with prospective applicants to the program





- c. Focus groups with graduates
- d. Focus groups with academics
- e. Focus groups with employers

2.1 NEED ASSESSMENT SURVEY

This survey was developed by the project consortium to 1) attain the level of the satisfaction of officials and therapists regarding the current situation of rehabilitation education in Jordan, 2) determine the extent of the need to develop a master program in interdisciplinary rehabilitation in Jordan and 3) determine the priority areas in rehabilitation in Jordan that needs to be tackled.

The survey instrument is a three-part, 16- item questionnaire compromising open and closed questions (Appendix 1). The development of the questionnaire was aided by consideration of the available literature in the area as well as the experience of the research team. Part 1 was to elicit general information about the responder including, job title, number of years of experience, work setting, and contact information. Part 2 considered questions about the level of the responder satisfaction of the rehabilitation education and services in Jordan. In part 2, respondents were asked to rate on a five-point Likert scale (1= strongly disagree, 2=disagree, 3= neutral, 4= agree, 5=strongly disagree) the level of agreement they attach to 9 statements. Whilst in Part 3, included 3 open ended questions addressing priority needs in rehabilitation in the areas of neurology, orthopaedic and paediatric.

2.2 FOCUS GROUPS

Focus groups at three fold of stakeholders; graduates, academics, and employers were conducted. Graduates of the three governmental universities who offer bachelor degree in Jordan (UJ, JUST, HU) were recruited from the academic records of the graduates in the three universities. All physiotherapy and occupational therapy academic staff were invited to attend the staff focus group held in their university. Employers from both the governmental and private sectors were also invited to participate in the focus groups. Table 2 and 3 below provides details of those who participated in the focus groups.

The graduates' focus groups focused on eliciting the perceived weaknesses and strengths of their bachelor programs and the main areas of skills and knowledge that they think is important to be





improved in the curriculum of rehabilitation education in Jordan. The academic and employers focused groups emphasised on gaining in depth information about the perceived challenges that rehabilitation professions including PT and OT face in Jordan, the strengths and the weaknesses in the current educational programs, the market needs and what areas need to be improved to bridge the gap between the market needs and the graduates' competencies (Appendix 2).

Table 2: Graduates focus groups in University of Jordan (JU), Jordan University of Science and Technology (JUST), and Al-Hashemite University (HU) with physical therapy (PT) and occupational therapy (OT) specialists

Place of focus group	Specialty	Year of graduation	Years of experience since graduation	Citizenship	Current employer
JU-1	3 PT, 1 OT	2004, 2010, 2010, 2011	5-12 Years	Jordanian	Academic institution
JU-2	2 PT, 1OT	2017, 2018		Israeli	
JUST-1	ОТ	2006, 2006, 2010, 2012, 2012	3, 3, 3, 5, 9	Jordanian	Governmental hospital
JUST-2	4 PT, 1 OT	3: 2015 2:2016	2 M, 18 M, 11 M	4: Israeli 1: Bahraini	Private Clinical settings
HU-1	3 OT, 1PT	2015, 2016	3, 11,11, 9, 0,	2: Saudi 2: Jordanian	Academic institution
HU-2	РТ	2017	0	Jordanian	Not employed





3 NEEDS ASSESSMENT FINDINGS

3.1 Need Assessment Survey:

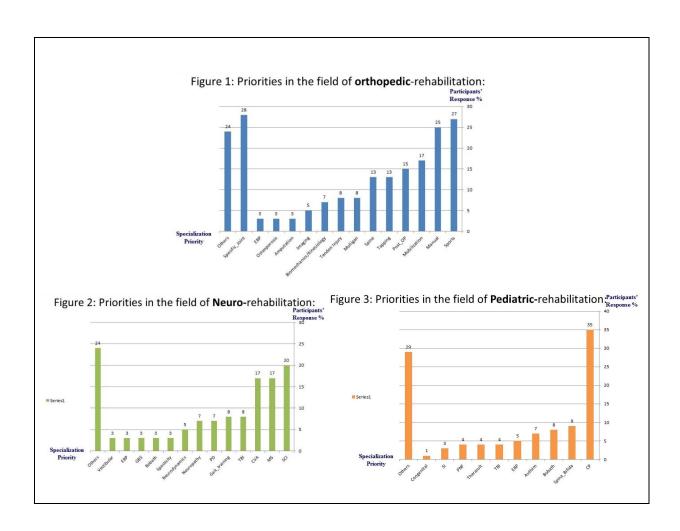
Table 5 provides the response outcomes of the need assessment survey. About 40% of the participants disagreed with that the current levels of bachelor degree training in Jordan, is appropriate to meet the national and regional current needs. In this survey, only 20% of the responders thought that current rehabilitation undergraduate training and education is comprehensive and sufficient for all levels of care, on the other hand. About 76% of the responders demonstrated opinions indicating that Jordanian rehabilitation education should be advanced by having specialized Master of Science. The majority of participants agreed that having a specialized master would improve the knowledge of rehabilitation professionals (83%), clinical competence (82%), hiring potentials (40%), and job advancement (59%). About 81% of the survey participant concluded agreeing that there is a need for more graduate rehabilitation degrees in Jordan opposed by 10% of the participants only.

Table 5: Participants'	Opinions Relate	ed to Rehabilit	ation Field Sta	tus	
Statement	Strongly Agree N (%)	Agree N (%)	Neutral N (%)	Disagree N (%)	Strongly Disagree N (%)
Jordanian rehab education is appropriate at present	7 (9)	18 (24)	23 (31)	7 (9)	23 (31)
Jordanian rehab education is appropriate for future	7 (9)	11 (15)	34 (45)	19 (25)	3 (4)
Jordanian bachelor education is sufficient	3 (4)	12 (16)	26 (35)	28 (37)	6 (8)
Jordanian bachelor education should be advanced	31 (41)	26 (35)	10 (13)	5 (7)	3 (4)
A clinical master program will improve therapists' knowledge	39 (52)	23 (31)	9 (12)	1 (1)	3(4)
A clinical master program will improve therapists' clinical competence	37 (49)	25 (33)	7 (9)	0	3 (4)
A clinical master program will improve therapists' Hiring odds	10 (13)	20 (27)	22 (29)	15 (20)	4 (5)
A clinical master program will improve therapists' career advancement	12 (16)	32 (43)	16 (21)	10 (13)	3(4)
A clinical rehabilitation master program is needed in Jordan	28 (37)	33 (44)	6 (8)	5 (7)	2 (3)





Regarding the post-graduate specialization priorities, most of the responders indicated a need in orthopedic specialization for specific joints (28%), sports (27%), and manual therapy (25%). In the field of neurology, spinal cord injuries topped the responders' perceived specialization needs with about 20% of the response indicated that this area is a priority in Jordan, while multiple sclerosis and stroke came second with about 17% response for each. In the paediatric are, cerebral palsy was represented significantly as a top needed specialized area by 35% of the responses followed by spina bifida (9%) and specialized Bobath therapy (8%). Participants perceived specialization priorities are demonstrated in Figures 1-3.







3.2 Need Assessment Survey:

Main themes emerged from the focus groups discussions are summarized in Table 6.

3.2.1 Focus groups with graduates

High percentage (75%) of interviewed graduates showed the interest in seeking higher education degree in a clinical master's program in rehabilitation sciences in Jordan. Several reasons were mentioned by graduates in focus groups to seek such a degree in Jordan including to be specialized in certain field (orthopaedic or neurology), to gain advanced clinical skills, to improve the status of rehabilitation in Jordan and Arab countries. Moreover, participants indicated that a master degree would be important to increase chances of employment. The existence of a master program in Jordan was viewed as an excellent opportunity to seek higher education in the field as it will reduce the burden and the need to travel abroad to gain a similar degree.

The strengths and weaknesses in the entry level degree (bachelor) was discussed with interviewed graduates. Number of strengths in the bachelor degree curriculum was reported including the strength of the theoretical part of the curriculum, the comprehensiveness of the curriculum, the reputation of the university based on the pass rate of the national exam. However, several areas were lacking in graduates' bachelor degree including very low practical hours and limited amount of clinical hands on skills, the clinical reasoning, the use of standardised outcome measures, and practicing the skills of documentation. Moreover, they indicated that certain staff issues contributed to the weakness of education outcomes such as shortage in staff, frequent changes in staff members, and lack of specialization in staff. Finally, lack of sufficient equipment was also a complaint they brought up. Graduates described their current relationship with other rehabilitation professionals in the interdisciplinary work as weak, varied, and not implemented but it is important to have it. Moreover, graduates stated clearly that teaching skills in clinical practices should be given the maximum weight in the master's program followed by evidence based practice (EBP), clinical reasoning, advanced clinical skills in specialised areas and conducting research.

3.2.2 Focus groups with and employers

Many challenges in the current rehabilitation profession in Jordan were reported by the academics and employers. These challenges can be classified into 3 categories.





- 1. The weakness in the current educational rehabilitation programs in Jordan. The reported weaknesses included: the insufficient practical training in the entry level (bachelor) degree, lack of comprehensive approach for assessment and interventions of various disabilities, lack of clinical reasoning, the lack of critical thinking and the use of evidence-base practice.
- 2. The very limited opportunities for continuing professional development. This included the absence of post-graduate programs or specialized fellowship or residency training programs that help therapists to focus on specific disorder and be able to rehabilitate it.
- 3. The current situation of the rehabilitation professions including the PT and OT in Jordan. This include but not limited to 1) the lack of awareness about the rehabilitation professions from the general population and from other health care professions, 2) lack of interdisciplinary teamwork concept and models, 3) issues related to therapists' autonomy and interference with other professions such as MDs, 4) issues related to the job satisfaction including poor incentive/ financial rewards, insufficient jobs, and cultural gender issues.

However, several solutions were suggested to face these challenges. Participants indicated that improving current educational programs' curricula is a priority to strength the rehabilitation professions' status in Jordan. Approaches for improving the educational outcomes of the current programs include enhancing the clinical reasoning skills as well as increasing the training periods locally or provide opportunities for training abroad and acquiring international accreditation for the programs. Participants also believed that, they specialized graduate programs that improve the professional level of gradates is required. Moreover, employers pointed out number of methods to improve the current situation of rehabilitation in Jordan including reforming the current legislations with stringent laws for establishing new rehabilitation centers and working on stronger professional bodies for rehabilitation in Jordan.

When considering the establishment of a master program in clinical interdisciplinary rehabilitation, employers suggested several rehabilitation priorities that need to be considered in this program. These suggestions included early interventions that are comprehensive and the use of client-centred approach. Additionally, they suggested focusing on the lacking areas in the bachelor degree including scientific writing, clinical skills, and clinical reasoning, improving the attitude of lifelong learners and equipping graduates with required skills that enables them to be leaders in their settings and to advance the field of rehabilitation in Jordan.



Project Number: 573758-EPP-1-2016-1-JO-EPPKA2-CBHE-JP



enables them to be leaders in their settings and to advance the field of rehabilitation in

Jordan

Table 6: Main themes identified in the focus group discussion Graduates' focus groups **Employers' focus groups** Participants' interest in seeking higher education Challenges in the current rehab profession: degree in PT/OT: 75% The weakness in the current educational rehabilitation programs in Jordan Reasons: the insufficient practical training in Specialization: To be specialized in certain field (orthopedic or neurology). This would increase the entry level (bachelor) degree lack of comprehensive approach for chances for employment. To gain advanced clinical skills. assessment and interventions of To strength the profession status in Jordan various disabilities To improve the status of rehab in the Jordan & lack of clinical reasoning, the lack of critical thinking and the Arab countries. use of evidence-base practice Feasibility & affordability: It is easier, closer, and cheaper to join a good program in Jordan Lack of opportunities for post-graduate without the need to travel abroad. programs To learn how to be a life learner Lack of specialized training programs The current situation of the rehabilitation professions including the PT and OT in Jordan Strengths identified in the undergraduate Management strategies to overcome challenges: education: Improving current educational programs' The strength of the theoretical part of the curricula curriculum. The comprehensiveness of the curriculum. ➤ Enhancing the clinical reasoning skills Reputation of the university/pass rate of > Increasing the clinical training periods the national exam. locally Provide opportunities for training abroad Acquiring international benchmarking or Weaknesses identified in the undergraduate accreditation for the programs. education: Establishing specialized graduate programs Very low practical and clinical hours. Reforming the current legislations with Limited clinical skills stringent laws for establishing new Lack of clinical reasoning skills. Lack of ability o select, choose or use clinical of rehabilitation centres Working on stronger professional bodies for outcome measures. rehabilitation in Jordan. Limited skills of clinical documentation. Having weak knowledge and limited skills of how to implement interdisciplinary management approaches in rehabilitation Staff issues: shortage in staff, frequent changes in staff, and lack of specialty in staff. Main areas to be to be improved in post graduation Main areas to be improved in post graduation programs: programs: Evidence based practice The use of client-centred approach. Clinical reasoning Improve skills in lacking areas such as scientific Advanced clinical skills in specialized areas Conducting research writing, clinical skills, and clinical reasoning Improving the attitude of lifelong learners Equipping graduates with required skills that





3.2.3 Focus groups with academics

Academics pointed out several challenges that rehab professionals face in Jordan. These challenges included 1) lack of awareness among the general population and health care professionals of the role of the rehab professionals in managing different conditions, 2) lack of the profession autonomy which is restricted by the legislations and regulations among the governance (ministry of health, 3) the low professional representation and 4) the low competencies among graduates in clinical reasoning. The academics indicated several approaches to overcome these challenges; one of those was the establishment of post graduate programs. Participants believed that post graduate programs would help to strengthen the position of the rehab professions in Jordan by providing continuous educational development opportunities. These programs would help in improving the research and teaching quality and provide up to date advance knowledge and skills; thus it may contribute to better rehab services in Jordan. Participants indicated that such programs need to be benchmarked to international standards to ensure quality of graduates. Participants also indicated that these programs should emphasise on improving clinical reasoning skills, professional skills as well as teaching and research skills. Thus to equip the job market with highly qualified professionals and clinical educators.



Table 7: Main themes identified in the focus group discussion

Academics' focus groups

- Challenges in facing the current rehab profession:
 - Lack of awareness (public/professional) →
 low public image of profession and
 identity → low referral
 - Lack of autonomy for the rehab professions
 - Absence of model (reference) practice
 - Weakness of monitoring/quality (legislation) due to low professional representation)
 - Diminished job description
 - Traditional rather than updated evidence based practice
 - Low competencies of graduates in clinical reasoning
- Challenges facing the OT/PT education in Jordan:
 - Limited staff (educators)
 - Limited lab equipment
 - Limited training placements
 - Low interdisciplinary team work
 - Low practical skills (stemmed from poor curriculum)

- Management strategies to overcome challenges in the current rehabilitation professions
 - Develop stronger professional bodies
 - Improve the outcomes of the undergraduate graduate programs
 - Establish post graduate programs
 - Provide continuous medical education
 - Improve profession's image
 - Improve research and teaching quality
 - Improve quality and practical training
 - Problem solving (clinical reasoning)
 - > Improve rehabilitation quality services
- Management strategies to overcome challenges in the OT/PT education
 - Attract qualified professors/ clinical instructors
 - Establish specialized, well-equipped training center
 - Strengthen the practical part of curriculum
 - Continuing education (for professors and therapists)
 - Programs to be benchmarked to international standards





4 RECOMMENDATIONS:

The project consortium discussed all the outcomes from the previous steps and drawn the following statements to highlight the "national rehabilitation priorities in Jordan". Drawing these statements entailed a process of drafting, revising and refining these priorities in consecutive meetings.

- Comprehensive up to date rehabilitation services are very much needed in Jordan. However, there is lack of awareness among general population and among other health care professionals.
- 2. There are several challenges that face the rehab professionals in Jordan including the OT and PT which act as a barrier for providing quality rehab services to clients. Among those is the low level of competencies among current professionals in many areas but notably the use of advanced clinical skills, the use of clinical reasoning concepts and evidence based practice are the most prominent.
- 3. The establishment of postgraduate programs is very much needed and can be the back stone to overcome several challenges that the rehab professions face in Jordan. The establishment of a good quality post graduate program in rehabilitation in Jordan may contribute to strengthen the rehab professionals in several ways:
 - a. It will contribute to deliver the community and the job market with highly qualified professionals who are equipped with up to date knowledge and skills in specialised areas of practice.
 - b. It will contribute to a better teaching and research quality.
 - c. It will open the channel for better continuing educational development training and opportunities provided by the graduates.
 - d. This in turn will contribute to enhance the level of the awareness about these professions.
 - e. This also in turn will help to improve the rehab professions image in Jordan.
- 4. The newly developed postgraduate program in rehabilitation in Jordan needs to address the several deficits that were acknowledged in the undergraduate education and should emphasise on the following aspects:
 - a. Improving the clinical professional aspects: Equip the graduates with knowledge and skills to designing and implementing autonomously professional approaches in





- specialised areas of practice using clinical reasoning skills and using evidence based practice methods.
- b. Improving the skills of being clinical educators: Equip the graduates with skills to use using effective pedagogical approaches in delivering educational materials.
- c. Improving the research skills: Equip the graduates with skills that enable them to critically read literature and additionally to critically being able to design and implement research.
- d. Improve the leadership and advocacy skills that would enable them to advance their profession in their positions
- e. Improve the skills to work effectively in interdisciplinary settings.





REFERENCES

- 1. Department of Statistics. Jordan Census. 2015. http://web.dos.gov.jo/wpcontent/uploads/2017/01/2015.pdf2017).
- 2. Jordan News Agency (Petra). People with disabilities make up 13% of community. The Jourdan Times. 2015 March, 17.
- 3. Al-Majali SA, Faddoul KJ, Yasin L, Mhedat M. The rights of disabled people in the Hashemite Kingdom of Jordan as per the national legislative system and international standards. Jordan: National Center for Human Rights; 2008.





APPENDİX

The need assessment survey for the development of a master degree program in clinical rehabilitation in Jordan

This survey is to assess the national and regional needs for developing a master program in clinical interdisciplinary rehabilitation at Jordan University of Science and Technology. Participation in this survey is voluntary. Your participation is important to us. Please answer the survey questions honestly and completely.

Contact information of person responsible for completing the questionnaire

Name	
Job title	
Number of years in your current job	
Qualifications	
Address	
Work phone number	
Email	





General information about clinical psychologists within your organization

How many physiotherapists and occupational therapists do work in your organization with a diploma degree?	Physiotherapists: Occupational therapists:
How many physiotherapists and occupational therapists do work in your organization with a bachelor degree?	Physiotherapists: Occupational therapists:
How many physiotherapists and occupational therapists do work in your organization with a master degree or above?	

Need assessment:

Please provide following information about clinical rehab professionals in Jordan.

Q. No.	Question	Yes	No	Don't Know
1	The country produces sufficient number of specialist rehab professionals to fulfill its needs.			
2	There is adequate number of specialist rehab professionals available in the country to fulfill it needs.			
3	National and regional market demand is high on having specialist rehab professionals			
4	If national and regional market demand is high on the provide evidence for this demand?	nis fiel	d, can	you





5. The current levels of bachelor degree training in physiotherapy OR occupational therapy in Jordan is appropriate to meet the national and regional needs at the present time

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

6. The current levels of bachelor degree training in physiotherapy OR occupational therapy in Jordan is appropriate to meet the national and regional needs in the future

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

7. The training and education that rehab professionals (i.e. physiotherapy and occupational therapy) receive now in Jordan at the bachelor level is comprehensive and sufficient to manage all levels of care.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

8. The level of education and training of rehab professionals (i.e. physiotherapy and occupational therapy) should be advanced in Jordan to include a specialized master degree in clinical rehabilitation.

Strongly agree Neutral Disagree Strongly disagree		~ .	Agree	Neutral	Disagree	.
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5 4 3 2 1

9. A specialized bachelor degree in clinical rehabilitation in Jordan would increase the levels of knowledge of rehab professionals (i.e. physiotherapists and occupational therapists).

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

10. A specialized master degree in clinical rehabilitation in Jordan would increase the levels of clinical competence of clinical psychologists.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

11. Holders of specialized bachelor degree in clinical psychology have the advantage in hiring over holders of rehab professionals (i.e. physiotherapists and occupational therapists).

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

12. Holders of specialized master degree in clinical rehabilitation have the advantage for advancement in organization over holders of other generic rehab degrees

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1





13. There is a need to for more post graduate degrees in clinical rehabilitation in Jordan.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

14. In the field of orthopedic rehabilitation, please provide the top 5 priorities that needs to be tackled.

1	
2	
3	
4	
5	





15. In the field of orthopedic rehabilitation, please provide the top 5 priorities that needs to be tackled.

1	
2	
3	
-	
4	
•	
5	

16. If possible, please provide a list (name of institute, contact details and name of programme/s) and of all institutes that provide education and training related to clinical rehabilitation in Jordan?





No.	Name and location of Institute	Contact Details	Name of programme/s
1			
2			
3			
4			
5			
6			
7			

17. If possible, please provide a list (name of institute, contact details and name of programme/s) and of all institutes that provide education and training related to clinical rehabilitation in the MENA region?

No.	Name and location of Institute	Contact Details	Name of programme/s
1			
2			
3			
4			
5			
6			
7			





Employer satisfaction with physiotherapists/occupational therapists graduates in Jordan

This survey is to assess the employers' satisfaction with physiotherapists/ occupational therapists graduates in Jordan. Participation in this survey is voluntary. Your participation is important to us. Please answer the survey questions honestly and completely.

In the following questions, please tick the number that best describe the graduates' level for each item according to your perception.

1. Competency area

Item	1 (un-satisfactory)	2 (Satisfactory)	3 (Good)	4 (Excellent)
Professional behavior: demonstrates professional behavior appropriate to a physiotherapist/occupational therapist				
Assessment: assesses the client's abilities, problems and needs				
Interpretation and diagnosis: interprets and analyses assessment findings for the diagnosis of client's problems and definition of client's needs				
Planning: develops a physiotherapy intervention and management plan to meet defined goals				
Implementation: implements physiotherapy strategies				
Evaluation: evaluates the effectiveness of physiotherapy				
Health care: operates effectively within the health care system				
Management: applies management skills in physiotherapy practice				





2. **Graduates attributes**

ltem	1 (un-satisfactory)	2 (Satisfactory)	3 (Good)	4 (Excellent)
Openness to new ideas				
Receptiveness to the use of information technology as applied to health				
Highly developed communication and interpersonal skills				
Capacity for independent critical thought and self-directed learning				
Ability and confidence to participate effectively in collaborative learning as a team member, while respecting individual differences				
Well developed cognitive, analytic and problem-solving skills				
Understanding of the methodological bases of research activity				
Understanding and appreciation of social and cultural diversity				
Ability to plan work and to use time effectively				
Leadership capacity				





The focus group guide with academic staff

1. Can you tell us about yourself?

Probes:

- a. Age,
- b. Work place
- c. Work setting
- d. Years of experience in teaching in the field of rehabilitation
- e. Courses that you often teach
- 2. What challenges does face the PT/OT profession in Jordan?
- 3. What are the major issues (unmet needs) in the field of rehabilitation in Jordan that needs to be addressed?
- 4. How do you think the status of PT/OT profession can be improved in Jordan?
- 5. What do you think of the current PT/OT education in Jordan?
 - a. Probe: how well do you think the current graduates are prepared to meet the employers needs?
 - b. Probe: which teaching strategies do you use and you consider to be most effective in promoting student learning?
 - c. Probe: which aspect of university education is lacking?
 - d. Probe: how well graduates worked in multidisciplinary/interdisciplinary teams?
 - e. Probe: how can you ensure (your university) ensure that their curriculum meets the needs of employers?
 - f. Probe: Which aspect of university education could be improved and how? Give example?
- 6. We are planning to establish a master program in clinical interdisciplinary rehabilitation (OT and PT combined) in JUST, what aspects do you think will be important to consider to ensure that the program deliver the needs of the labor market.
 - a. Probe: what rehabilitation priorities should be considered?
 - b. Probe: how the program can better equip the graduates with better skills and knowledge that reflects on better rehab services provided to the clients in Jordan.





The focus group guide with employers (Owners of private rehab clinics or centers /seniors in governmental hospitals/ seniors in national and international NGOs/PT-OT societies in Jordan)

7. Can you tell us about yourself?

Probes:

- f. Age,
- g. Work place
- h. Work setting
- i. Years of experience in administration or as a senior PT/OT
- j. Number of PT/OT in your service (for OT/PT societies/ number of individuals registered in the society)
- 8. How many PT do you employ annually?
- 9. What challenges does face the PT/OT profession in Jordan?
- 10. What are the major issues (unmet needs) in the field of rehabilitation in Jordan that needs to be addressed?
- 11. How do you think the status of PT/OT profession can be improved in Jordan?
- 12. What do you think of the recent PT/OT graduates that you have employed?
 - g. Probe: how well prepared they were as physiotherapists/occupational therapists?
 - h. Probe: which aspects of their university education were most effective
 - i. Probe: which aspect of university education is lacking?
 - j. Probe: how well graduates worked in multidisciplinary/interdisciplinary teams
 - k. Probe: how well graduates were able to use ICT for continuing educational development?
 - l. Probe: Which aspect of university education could be improved and how? Give example?
- 13. We are planning to establish a master program in clinical interdisciplinary rehabilitation (OT and PT combined) in JUST, what aspects do you think will be important to consider to ensure that the program deliver the needs of the labor market.
 - a. Probe: what rehabilitation priorities should be considered?
 - b. Probe: how the program can better equip the graduates with better skills and knowledge that reflects on better rehab services provided to the clients in Jordan.





The focus group guide with recent graduates

Introductory question:

1. Can you tell us about yourself? Age, semester of graduation, .. etc.

Factors influencing choice of study:

- 2. How did you come to study physiotherapy? *Probes*:
 - a. Interest of helping people/patients
 - b. Interest in work of the profession
 - c. Income
 - d. Desire to work independently
 - e. Family tradition

General attitude about profession

- 3. Give me three words that describe your feeling about studying physiotherapy
 - a. Probe: What are the most positive things about studying physiotherapy?
 - b. Probe: what are the most negative things about studying physiotherapy?

Program of study

- 4. What do you think of your program of study? How much do you think was your program of study useful in preparing you for the work in the field?
 - a. Probe: In which area your program of study does it excel?
 - b. Probe: In which area your program of study does it fall short?
 - c. What are the areas of knowledge that you think are most important to study?
 - d. What are the practical skills that are most important you attained?

Employment in field of study

- 5. How do you find the job hunting experience in your field of study?
 - a. Probe: Could your university have done anything better to prepare you and your peers to get a job in your field.
 - b. Probe: What are the challenges?
 - c. Probe: What are the facilitators?
 - d. What do you believe employers are looking for in a PT/OT graduate? i.e. what are the specific skills that you learned in university that are important in the professional world?

Satisfaction of their choice of physical therapy as a career

How do you perceive your choice of PT/OT as a career? (Social aspect, Purpose satisfaction, financial, impact on community, physical and mental stress)

What specific field/ type of institution you prefer to work as PT/OT? What do you not prefer (e.g. Pediatrcs Vs. neuro/ Hospital Vs. private clinic)





Their relationship with other healthcare professionals

How do you describe your relationship with other healthcare professionals and patients?

Probe: Have you found that you were aware of the role of other healthcare professionals?

Do you think other healthcare professionals understand your role as PT/OT?

Did you found that patients had realistic expectations from you as physical therapists/occupational therapists?

Do you think community need more awareness of the role of PT/OT?

The need for postgraduate study in rehab in Jordan:

We are planning to establish a master program in clinical interdisciplinary rehabilitation (OT and PT combined) in JUST, what aspects do you think will be important to consider to ensure that the program deliver the needs of the labor market.

- c. Probe: will you be interested in registering in such a program? Explain your answer?
- d. Probe: what rehabilitation priorities should be considered?
- e. Probe: how the program can better equip the graduates with better skills and knowledge that reflects on better rehab services provided to the clients in Jordan.