

FRENCH LANGUAGE AND THE SUDAN; MISSED APPOINTMENT

* Dr. Mahmoud Adam Daoud

* Humanities, sociolinguistics. University of Nyala

Abstract

This article aims to project some light on the evolution of the presence of French language in Sudan and draws some lines of its history and its presence home. It turns out that despite the coincident that were about to make of Sudan, or at least any of its parts, a francophone country and its neighborhood with many Francophone countries and the efforts deployed to develop its teaching and learning, there is still a great work to do.

KEYWORDS: SUDAN. LANGUAGE. FRENCH .EDUCATION. EVOLUTION.

RESEARCH ARTICLE

It's been a considerably long time French is present in Sudan and there are facts and circumstances, as the neighborhood with Francophone countries, which are supposed promote the teaching of French in this country. We shall explore in this article the evolution of the French presence in the country and the facts that influence the teaching and learning of the language. We first discuss some historical elements involving France and its language in the country and take stock of what has become, in time, the teaching of this language in Sudan.

The first French influence on Sudan, although it was indirectly, constituted a point of radical change in the country's modern history as noted Attaalsid (2001:1):

"The modern history of Sudan owes much to Napoleon. It is the victory in 1797 in the Battle of the Pyramids which destabilized the power of the Mamelukes, the Caucasian ruling class in Egypt, and opened the way to access the power of the soldier of fortune Albanian Muhammad Ali. " This Mohammed Ali, in search of gold and men to strengthen his power and to secure the southern border of the state, occupied the Sudan and it is this occupation that brought together the maximum territories that make up the present-day Sudan.

When the Egyptian campaign to occupy the Sudan has started and began its work, the French presence was felt there too. Indeed, it was accompanied by the French traveler, Frederick Cailliaud (to whom the French Cultural Center in Khartoum is called) and it was he who was the first to publish a work with drawings of archaeological sites of Nubia in 1826.

After the establishment of the Turkish-Egyptian power in Sudan in 1821, France was the first country to open a consulate in 1839, and have installed nationals (including 20 families remained until the end of Turkish-Egyptian rule) (Abousalim 1979).

After the fall of the Turkish-Egyptian rule, which coincides with the colonial expansion in Africa, the Sudan was a major point of interest for the French. They wanted to link their colonies in Central Africa with that of Djibouti in the east. The Berlin Conference of November 1884 granted the French territories extending to the west of Darfur in Sudan, but they stopped at Wadaye. Dar Masalit had chosen to join the Sudan in 1922 after the agreement Golani. In Southern Sudan, for cons, they occupied the lands extending to Kadok (current Fashoda) in July 1899 but the English considered this part as part of their expansion areas, they arrived, too, at Fashoda in September 1899 to pop a crisis between the two colonial powers (the Fashoda incident). The resolution of this crisis by withdrawing French led negotiations on many issues and ended the third Anglo-French Entente Cordiale of 1904-1914 (Bahil 1997).

As for the teaching of French Sudan, it was introduced for the first time, according to Bashir (1970), in 1846 when a missionary school has taught it to the children of foreigners residing in Khartoum, the same date where the educational institutions began to teach foreign languages in a systematic way in Europe (Porcher 2004). But this teaching was interrupted in 1885 with the arrival of Mahdi to power and restarted again with the arrival of the Anglo-Egyptian and the return of the missionaries in 1899. This language continued to be taught in missionary schools and schools of foreign communities without being in public schools, but being taught by other schools present in the country, the educational authorities had recognized it as regards to qualification for admission to higher education. The Khartoum University College (University of Khartoum since 1956) required for admission to the Faculty of Arts, a Sudan School Certificate or Cambridge School Certificate, Certificate Greek or Egyptian Certificate with at least an average of 70% in three subjects chosen among nine. French was among these materials. (University of Khartoum 1970).

Another institution that taught French was the Egyptian educational mission in Sudan. As French is taught in the Egyptian system, these schools also teach it in Sudan.

When the Egyptians have opened a branch of Cairo University in Khartoum in 1955, French was taught as a course of two credit hours in the Faculty of Law.

When Sudan gained independence in 1956, France was the fifth country to renew diplomatic relations with Sudan and revive its investments.

On the initiative of French families and the French Lay Mission the Crédit Lyonnais (branch of Khartoum) funded the opening of a French school in 1957. It gradually developed and a French class for those who want learn it was open. Then in 1958 two independent institutions, the French Cultural Center and the French School were created (Elamin 2000) (Abdelgadir 2003).

In 1960, according to Professor A. Altayeb, Dean of the Faculty of Letters of the University of Khartoum at the time (interviewed August 23, 1996), an initiative was taken to the University of Khartoum by the wife of a history professor at the faculty began to give French lessons in the evening to her husband's colleagues. Gradually the group has grown and asked for help from the Embassy of France in Khartoum. Then the idea of introducing the French in the Department of European Languages of the Faculty of Arts was born. But the transition to institutionalization was not easy. A project to this effect was presented to the University Senate for the first time but it was rejected, and then presented for the second time, it was ratified to give birth to a section within the Department of European Languages in 1962. In 1964 the section has grown to become an independent department (Maury 1988).

It should be recalled that in 1963, the Organization of African Unity has recommended that former British colonies introduce the teaching of French in their education systems, and the former French colonies should do the same with English (Anis 1991).

Omdurman Islamic University opened a department of languages (English and French) in 1973; it was divided in 1978 to give birth to two independent departments; French Language and literature and English language and literature.

Then the French departments have succeeded. After the enlargement of higher education in the early 1990s, we now have ten French departments in the faculties of arts and education in Sudanese universities.

This position was supported by UNESCO campaign (organization that actively participates in the financing of education) the democratization of African school systems in much the same years (Ibid.). In these circumstances, The Higher Institute of Teacher Training (created in 1960 and became in 1974 a Faculty of Education and annexed to

the University of Khartoum), which was previously financed and equipped by UNESCO opened a department French in 1966 to train teachers who were to teach this language in secondary schools in Sudan.

An event that was widely served French teaching was the arrival of Arab nationalists to power with Nimeiri in 1969. This regime, anxious to achieve Arab unity, began with the approximation of the educational systems. It began with the merger with the Egyptian system to arrive later to the unification of programs with all Arab systems (Anis 1991). As French was taught in Egypt and that its introduction was supported by UNESCO and the Organization of African Unity, it found the way open to access the Sudanese secondary school.

The National Conference on Education in Sudan of October 1969 (base of reforms of 1970) decided to include in its recommendations the teaching of French in secondary schools. They went further to point to the French-English equality:

"We do not just teach one foreign language. Our relations with African countries and our relations with the world make French and English equal in importance. In high school, there is no problem to learn more English with those who specialize in the field of science and Arabic or English or French to those who specialize in letters" (Democratic Republic of Sudan 1970: 10).

French was thus introduced in the 1970-1971 school year, first in two schools for a trial period of two years.

To start the policy of introducing the teaching of French in secondary education, Mohieldin Saber, Minister of Education at the time said: *"In order to increase the general culture of the people and deepen our relationships with our African neighbors, the second European language introduced in secondary schools is the French language"* (quoted by Anis, 1991: 175).

When the Sudanese authorities have decreed this subject in secondary school, they have advanced the following purposes:

"The French allows Sudan to consolidate its strategic position within the African continent;
- It provides access to technical and scientific progress and openness to the modern world;
- It promotes reading of African writers of French expression, knowledge of Francophone African communities and building relationships with them;
- It facilitates economic exchange between France and Sudan" (Adam 1986: 62).

Two years after the implementation of this policy, the Sudanese press, approving the decision, returned to the subject. Alshafa daily, one of the two newspapers at the time (both governmental) wrote in its issue of November 4, 1974 (quoted by Elamin 1979: 158) that the decision to teach French in secondary schools is due to:

- "The increasingly important role of the Francophone community as a whole;
- The concern for the diversification of training, information; knowledge belongs to everyone and is not only Anglo-Saxon;
- The policy pursued by France in the Middle East;
- The competitiveness of France at the political, industrial and technical level. "

The Ministry of Education continually called for teachers. In 1978 there were 150 teachers for a total of 130 secondary schools in Sudan (Elamin 1979).

This serious beginning has left Sudanese language specialists as Thelwell (1978: 2) write about the linguistic situation in Sudan: *"The French have recently been introduced and could challenge the position of English in the school future."*

Anis (1991) assessed the situation two decades after the introduction of French in the Sudanese secondary school. She sees that this *"decline of French in schools can only be attributed to the delay in the real democratization of education"* and concluded: *"The teaching of French policy appears as a failure, failure due first to the absence of any real status of the teaching of foreign languages, despite the symbolic recognition of the new education policy that combined teaching languages and general culture"* (ibid: 182).

As we have seen in history, the French language has had possibilities to enter the country, now it seems it is still far from finding its place in the educational system and the Sudanese language map. In the Sudanese universities, the departments of French are the least chosen by the students among the departments of languages.

At school, it's even worse, because among 2700 secondary school there are 239, 8.8% only providing teaching French language with 280 teachers (Ali 2012). In the Sudan School Certificate in 2012 there were 24 candidates who have chosen French among the 418,818 students who sat to examination.

regarding reading French writers, one of the purposes declared by the Sudanese authorities in introducing the French language, we asked the teachers of the University of Nyala (a University in a region neighboring two francophone countries) surveyed in November 2012, if they had read a book in French, we found none. And when we've asked if they have read a translation of a book from French, only 6 of the 36 teachers surveyed reported having done so. Among these 6 one had read a text in his or her specialty and the remaining 5 read literary works.

In order not to conclude, more investigation on why the French remains in the outskirts of Sudan without being able to actually access is to be conducted. But what is sure is that accelerating partnership programs and exchanges with neighboring francophone countries fully supported by a political will and economic partners can accelerate understanding and consequently the learning and usage of this language in Sudan

REFERENCES

1. Abdalla Altayeb Almajzoub (Pr), ex-dean of the faculty of Arts, University of Khartoum, interviewed in Khartoum in 23 August 1996.
2. Abdelgadir, H. (2003) : Les besoins langagiers et les objectifs de l'apprentissage du français chez les adultes au Soudan, Ph. D. thesis, University of Khartoum, 263 p.
3. Abousalim, M. I. (1979) : (Tarikh al khartoum) History of Khartoum, Dareljeel, Beyrou, 219 p.
4. Adam, B. M. (1986) : Documents audio-sonores-visuels et l'enseignement du français langue étrangère au Soudan, Ph. D. thesis, Université de Poitiers.
5. Ali, Afaf Ahmed (2012) ; Inspector, Federal Ministry of Education, interviewed on 9 September 2012
6. Anis, A. I. (1991) : Langues et éducation au Soudan ; éléments pour aborder la problématique de l'éducation linguistique, Ph. D. thesis , Université de la Sorbonne Nouvelle Paris 3, 446 p.
7. Attaalsid, M. (2000) : www.sudan.net
8. Bahl, G. (1997) : The Fashoda incident, www.cusd.chico.ca.us
9. Bashir, M. O. (1970) : (Tatawur altaliim fis Suodan 1898-1956)
10. Calvet, L.-J. (2002) : Le marché aux langues ; les effets linguistiques de la mondialisation, Plon, Paris, 220 p.
11. Conseil de l'Europe (1993) : Objectifs de l'apprentissage des langues vivantes, Vol. 1, Les éditions du Conseil de l'Europe, Strasbourg, 91 p.
12. Elamin, Y. (1979) : Le statut de l'enseignement du français au Soudan ; aspects sociologiques, linguistiques et pédagogiques, Ph. D. thesis, Université de la Sorbonne Nouvelle Paris 3, 367 p.
13. Elamin, Y. (2000) : La situation de l'enseignement du français et son utilisation au Soudan, non-Published article, 16 p.
14. Elamin, Y. et Abdelgadir, H. (1988) : 'La formation des enseignants de français au Soudan', Dialogues et Cultures, No 32, FPIP, pp. 141-147.
15. Elias, Y. (1979) : (*Harakat attariib bijame'at alkhartoum*) 'the movement of arabicisation in the University of Khartoum', paper presented to the conference on arabisation and the problems of the Arabic language in higher education held in the University of Khartoum from 15 to 20 January 1979, 8 p.
16. Elias, Y. (1985) : 'Le français et le monde du travail au Soudan' Dialogues et Cultures, No. 27, FIPF, pp. 195-199.



17. Maury, G. (1988) : '*L'enseignement du français au Soudan et les besoins du marché*', Dialogues et Cultures, No. 33, FIPF, pp. 150-153.
18. Porcher, L. (2004) : *L'enseignement des langues étrangères*, Hachette éducation, Paris, 127 p.
19. Democratic Republic of Sudan (1970) : (Massail assassia an alatfal walshabab) fundamental issues about children and youth, report presented to the UNESCO seminar held in Beirut from 23 to 28 February 1970, document No. 6/12/114 National Archives, Khartoum, 12 p.
20. Thelwell, R. S. (1978) : '*Aspects of language in the Sudan*' in Occasional papers in linguistics and language learning, No. 5, New University of Ulster, pp. 1-23.

Address for correspondence:

Author : Dr. Mahmoud Adam Daoud. Humanities, sociolinguistics. University of Nyala.

E-mail : makudu@hotmail.com , madaoud@nyalau.edu.sd

PSYCHOLOGICAL PROBLEMS ASSOCIATED WITH THALASSEMIA IN DIYALA PROVINCE, IRAQ

* Dr. Kareem Assi Obaid

* Pediatrics department, Medical College, Diyala University, Iraq.

Abstract

Background: Beta-thalassemia major is a chronic disorder of blood, having an extensive impact on the affected child. It involves lifelong therapeutic regime, with repeated blood transfusions. With improved life expectancy, due to improved medical management psychosocial aspects of thalassemia are gaining importance.

Objectives: Thalassemia is a chronic disease that manifests early in life that it leads to psychological and social problems for parents. We focused on parents to assess the impact of their child's disease and to assess the behavioral problems in multi-transfused thalassemic children and psychosocial factors affecting them.

Material and methods: This is a cross sectional study conducted in the Thalassemia Centre of Al-batool teaching hospital, Diyala, Iraq. The study was carried out from August 2013 to April 2014, parents who fulfilled the inclusion criteria were included in the study. The criteria were: a) established diagnosis of thalassemia of their child and the child was registered with the Thalassemia Centre for regular blood transfusion, b) parents who provided consent for the study

Results: The CBCL total scores were high in 32% patients, indicating the presence of behavioral problems. Higher CBCL scores were found in children of older age group, those with poor school performance, whose mothers' education was more than eighth standard, had history of death of thalassemic relative in family, greater duration of diagnosed illness, poor pre-transfusion hemoglobin level, and who had longer periods of school absenteeism.

Conclusions: Behavioral problems are common in multi-transfused thalassemic children. Early diagnosis and intervention of behavioral problems in these children would make them cope with thalassemia better.

KEYWORDS: BEHAVIORAL PROBLEMS. CHILD BEHAVIOR. CHECK LIST. MULTI-TRANSFUSED THALASSEMIA. FREQUENT HOSPITALIZATION. LONG-TERM COSTLY CARE.

1. BACKGROUND

Thalassemia is a blood disorder passed down through families (inherited) in which the body makes an abnormal form of hemoglobin. This disorder results in excessive destruction of red blood cells, and there is no effective treatment. Patients require lifelong blood transfusion, usually started within 6 to 12 months of birth of patient, which on other hand has its own complications. It is a chronic disease that manifests early in life that it leads to psychological and social problems for parents. We focused on parents to assess the impact of their child's disease.

Worldwide, thalassemia poses a serious public health problem due to the high prevalence. It extends from the Mediterranean basin and parts of Africa, throughout the Middle East, the Indian Sub-continent, South-East Asia, Melanesia and into the Pacific Islands, with reported rates ranging from 2% to 25% [1]. Each year, 50,000 to 100,000 children die of thalassemia major in low and middle income countries, while about 7% of the world's population is a carrier of a hemoglobin disorder [1]. The more severe forms are beta-thalassemia major, which warrants regular blood transfusion at an early age, and thalassemia intermedia which presents later and requires less frequent transfusions. The aim of regular blood transfusions is to eliminate the primary complications of severe thalassemia by ameliorating anemia and suppressing erythropoiesis. Patients are usually transfused at an early age. The chronicity and complications of thalassemia affect the quality of life of victims and parents and cause physical, psychological, and economic problems [2]. As there is no definitive cure for this disease, the majority exclusively depend on blood transfusions as a treatment option that creates a burden not only on health system but also on the affected families, who are vulnerable to, social, and psychological problems [3,4]. Various Quality of Life (QOL) studies conducted worldwide on thalassemia indicated poor indicators for the sufferers [5].

It is expected that these children are at high risk of developing behavioral and psychosocial problems like opposition, passiveness, anxiety, phobias and depression, which affect their self-confidence and give rise to emotions and thoughts which negatively affect their quality of life and compliance to therapy.[6] Many of the thalassemic children experience fear related to intravenous line insertion and subcutaneous infusion pumps. Children with thalassemia in the pre-school and latency age groups are usually anxious and excessively dependent on their parents.[7] They display psychosomatic symptoms and are frequently absent from school. Thalassemic children have more of negative self-concept when compared to their normal counterparts.[8]. Regular blood transfusions improve the overall survival of multi-transfused children but despite the progress made in preventing transfusion-transmitted infections (TTIs) over the last few years, TTIs continue to be a problem in many parts of the world (9). Blood transfusion is the main risk factor for transmitting viral hepatitis, particularly in patients with hematological diseases (10).The TTI problem is directly proportional to the prevalence of infection in the blood donor community (11). Patients with thalassemia commonly receive transfusions and thus, are exposed to transfusion-associated infections .Among these infections, hepatitis B and hepatitis C are the most common (12). Hepatitis B is an important infection in patients with thalassemia and prevention by vaccination is necessary .Transfusional hemosiderosis is a frequent complication in patients with transfusion dependent chronic diseases such as thalassemia and severe type of sickle cell diseases. As there are no physiological mechanisms to excrete the iron contained in transfused red cells (1 unit of blood contains approximately 200 mg of iron) the excess of iron is stored in various organs. Cardiomyopathy is the most severe complication covering more than 70% of the causes of death of thalassemic patients. Although the current reference standard iron chelator deferoxamine (DFO) has been used clinically for over four decades, its effectiveness is limited by a demanding therapeutic regimen that leads to poor compliance. Despite poor compliance, because of the inconvenience of subcutaneous infusion, DFO improved considerably the survival and quality of life of patients with thalassemia. Deferiprone since 1998 and Deferasirox since 2005 were licensed for clinical use. The oral chelators have a better compliance because of oral use, a comparable efficacy to DFO in iron excretion and probably a better penetration to myocardial cells. Considerable increase in iron excretion was documented with combination therapy of DFO and Deferiprone. The proper use of the three chelators will improve the prevention and treatment of iron overload, it will reduce .[complications, and improve survival and quality of life of transfused patients. [13,14

2. MATERIALS AND METHODS

This is a cross sectional Study conducted in the Thalassemia Centre of Al-batool teaching hospital, Diyala, Iraq. The study was carried out from August 2013 to April 2014. All Parents who brought their children for blood transfusion

those parents who fulfilled the inclusion criteria were included in the study. The criteria were: a) established diagnosis of thalassemia of their child and the child was registered with the Thalassemia centre for regular blood transfusion, b) parents who provided consent for the study. Data was collected on a questionnaire comprising 25 questions that was self- designed to assess the psychological and social problems, (name, date of diagnosis, family history of thalassemia, family death, consanguinity, no(frequency) of transfusions, volume of transfusions, chelation type, chronic illness, no.of affected siblings, bone marrow aspiration, parents education, serum ferritin, liver function test, HBsAG and Anti HCV, hepatosplenomegaly, bone changes, social problems, financial problems, weight, height, OFC, school performance, behavioral problems, drug reaction).

3. RESULTS

There was a preponderance of males in parenteral treatment group and females in oral treatment group (Table 1) and overall there were 56 males haematologic among the 100 patients in the study. Apart from 5 individuals with b-thalassemia were not receive chelation therapy, all other patients had oral or parenteral chelation therapy . During the 9 months had taken 100 case as sample of thalassemic patients in Diyala city to assess the psychosocial problems and the results in (table 4) explain the social problems and behavioral problems more common in parenteral treatment while the school absence higher in oral chelation treatment group . In(table 1) the demographic data of the patients. Table 2 explain the comorbidity associated with both treatment group.

Table 1: Demographic data of the patients participating to the study.

XXXXXXXXXXXX	Oral Chelation 27 case	Parenteral Chelation 68 case	P value
Gender			
Male	13 (0.48%)	40 (58%)	
Female	14 (0.51%)	28 (41%)	
Parents Education			
NON	2 (0.07%)	10 (0.14%)	
Primary	12 (0.44%)	22 (0.32%)	
Secondary	7 (0.25%)	31 (0.45%)	
High education	6 (0.22%)	5 (0.07%)	
Physical activity			
Normal	13 (0.48%)	36 (0.52%)	
low	12 (0.26%)	32 (0.47%)	

Table 2: Co-morbidities associated with the disease in both modes of Chelation.

XXXXXXXXXXXX	Oral Chelation 27 case	Parenteral Chelation 68 case	P value
bone changes	12 (0.44%)	47 (0.69%)	
Liver	9 (0.33%)	16 (0.23%)	
Spleen	13 (0.48%)	57 (0.83%)	

Hepatitis(type B,C)	2 (0.07%)	6 (0.08%)	
Other chronic disease	2 (0.07%)	6 (0.08%)	
Bone aspiration	4 (0.14%)	10 (0.14%)	

Table 3: Disease characteristics

XXXXXXXXXXXX	Oral Chelation 27 case	Parenteral Chelation 68 case	P value
Age of onset, At or before 1 st year After 1 st year	20 (0.74%) 7 (0.25%)	50(0.73%) 18(0.26%)	
Frequency of transfusion, Monthly Less than month More than month	14 (0.51%) 11 (0.40%) 2 (0.07%)	39 (0.57%) 29 (0.42%) 1 (0.01%)	

Table 4

	Oral Chelation 27case	Parenteral Chelation 68 case	P_value
Social problems	6 (0.22%)	27 (0.39%)	
School absence	19 (0.7%)	29 (0.42%)	
Financial problems	12 (0.44%)	30 (0.44%)	
Behavioral problems	12 (0.26%)	32 (0.47%)	

4. DISCUSSION

Studies over the past 25 years have shown that prevalence of behavioral disorders among thalassaemic children ranged from 23 to 80%, [15-16] and these psychological disturbances adversely affect compliance to treatment in thalassaemia. [17] In the present study, it was found that 32% of thalassaemic children had clinically abnormal CBCL total scores. Study by yalen et al. in Turkey had also revealed that older age (>12 years), higher education of mothers and poor school performance were associated with higher risk of behavioral problems. [1] In this study, 32% had behavioral problems and 60% had poor school performance which is similar to the results of a study in South Turkey [18] where 31% of thalassaemic children had anxiety disorders and 60% had poor school performance. The childhood psychological problems among thalassaemic children were similar to that seen in other chronic [19]. physical illnesses but had been neither recognized nor treated

REFERENCES

- 1-WHO-TIF Meeting. Management of hemoglobin disorders. Report of a joint WHOTI Fmeeting; Nicosia, Cyprus. Geneva: WHO; 2008.
- 2-. Weatherall DJ, Clegg JB: Inherited hemoglobin disorders: an increasing global health problem. Bull World Health Organ 2001, 78:704–712.
- 3-Shaligram D, Girimaji SC, Chaturvedi SK: Psychological problems and quality of life in children with thalassemia. Indian J Pediatr 2007 74:727–730.
- 4-Bandyopadhyay B, Nandi S, Mitra K, Mandal PK, Mukhopadhyay S, Biswas AB: A comparative study on perceptions and practices among parents of thalassemic children attending two different institutions. Indian J Comm Med 2003, 28:128–132.
- 5-Mikelli A, Tsiantis J: Brief Report: Depressive symptoms and quality of life in adolescents with beta-thalassemia. J Adolesc 2004, 27:213–216
- 6-Aydin B, Yaprak I, Akarsu D, Okten N, Ulgen M. Psychosocial aspects and psychiatric disorders in children with thalassemia major. Acta Pediatr Jpn. 1997;39:354–7. [PubMed]
- 7-Khurana A, Katyal S, Marwaha RK. Psychosocial burden in Thalassemia. Indian J Pediatr. 2006;73:877–80. [PubMed]
- 8- Moorjani JD, Issac C. Neurotic manifestations in adolescents with thalassemia major. Indian J Pediatr. 2006;73:603–7. [PubMed]
- 9-Lopez L, Lopez P, Arago A, Rodriguez I, Lopez J, Lima E, et al. Risk factors for hepatitis B and C in multi-transfused patients in Uruguay. J Clin Virol. 2005;34 (Suppl 2):S69-74.
- 10-El-Raziky MS, El-Hawary M, El-Koofy N, Okasha S, Kotb M, Salama K et al. Hepatitis C virus infection in Egyptian children: single centre experience. J Viral Hepat. 2004;11(5):471-6.
- 11-Jain R, Jose B, Coshic P, Agarwal R, Deorari AK. Blood and blood component therapy in neonates. Indian J Pediatr. 2008;75(5):489-95.
- 12-Feld J, Lee JY, Locarnini S. New targets and possible new therapeutic approaches in the chemotherapy of chronic hepatitis B. Hepatology. 2003;38(3):545-53.
- 13- Modell B. Total management of thalassemia. Arch Dis Child. 1977;52:489–500. [PMC free article] [PubMed]
- 14-Modell B, Berdoukas V. The Clinical Approach to Thalassemia. London: Grune & Stratton; 1984
- 15- Sherman M, Koch D, Giardina P, Seigel P, Siegel R, Shapiro T. Thalassemic children's understanding of illness: A study of cognitive and emotional factors. Anns N Y Acad Sci. 1985;445:327–36
- 16- Pradhan PV, Shah H, Rao P, Ashturkar D, Ghasias P. Psychopathology and self esteem in chronic illness. Indian J Pediatr. 2003;70:135–8. [PubMed]



- 17- Beratis S. Psychosocial status in preadolescent children with B thalassemia. J Psychosom Res. 1993;37:271–9. [PubMed]
- 18- Canatan D, Ratip S, Kaptan S, Cosan R. Psychosocial burden of beta-Thalassemia major in Antalya, South Turkey. Soc Sci Med. 2003;56:815–9. [PubMed]
- 19- Shaligram D, Girimaji SC, Chaturvedi SK. Psychological problems and quality of life in children with Thalassemia. Indian J pediatr. 2007;74:727–30. [PubMed].

Address for correspondence:

Author: Dr. Kareem Assi Obaid . Pediatrics department, Medical College, Diyala University, Iraq.

E-mail: karimalhamdany@yahoo.com

THE EFFECT OF THE REHABILITATION APPROACH ON THE INDICATORS OF PAIN AND SOME PHYSICAL VARIABLES AFTER PARTIAL RESECTION OF MENIS- CUS CARTILAGE OF THE KNEE JOINT

* Prof. Dr. Ammar Jassim , **Dr. Qusai Salih

*, ** Physical Education College, Basra University

Abstract

The knee joint considered one of the important and large joints in the human body and a percentage of injury in this joint (70%) of sports injuries, so it has become necessary to maintain the integrity of this joint, where the things that called for the researcher to choose the problem discussed although there are studies around is that the selection of the injured sample after doing the procedure by endoscopic way. The study aimed to identify the impact of rehabilitative approach proposed by the researcher for the rehabilitation of the injured (injury medial meniscus) of the knee joint. Identify differences in painkiller and physical variables and range of motion before and after the endoscopic operation and after the rehabilitative curriculum, it is found the presence of differences between the physical variables and determinants of movement before and after the endoscopic operation and after rehabilitative curriculum and in favor of tests and measurements after the rehabilitative curriculum. There are differences in one of the indicators of pain before and after the endoscopic operation and after rehabilitative curriculum, tests and measurements after the rehabilitative curriculum. The researcher used the experimental method to fit the research problem and the selection of the sample by intentional way which included patients with partial rupture in meniscus cartilage and was numbered (8). Researcher begun his rehabilitation curriculum after endoscopic operation by (four weeks). and after the application of the curriculum, tests should be done and then do as before withdrawing blood and after obtaining the data, Statistical processor have been done and the most important conclusions is that the rehabilitative curriculum has the impact of re-motor run of the knee joint and get rid of muscle atrophy of femoral muscle and the development of some of the physical variables and disposal of pain. the most important Recommendation of the researcher is using the endoscopic processes instead of surgical procedures because of their active role in the limitation of time and effort to return the patient to practice in the sports activity, and an emphasis on the use of the curriculum prepared by the researcher because of its role in the returning the individuals of the sample to a level as close as possible to their natural pre-injury.

KEYWORDS: REHABILITATION. PHYSICAL. PARTIAL. CARTILAGE. KNEE

1. INTRODUCTION AND IMPORTANCE OF THE RESEARCH

The rehabilitation of sports injury became worried for specialists in therapeutic and sports medicine, and how to return the injured people with less time and effort into an area of sports competitions and although both have his process of treatment methods but remains rehabilitative curriculum is the borderline in the healing of the players and their return to their level of natural. knee joint considered one of the important and large joints in the human body, whether in the practice of everyday business and sports activity, in particular, the percentage of injury at this juncture (70%) of the injuries (6: 2010) sports that affect athletes so it has become necessary to maintain the integrity of this joint in various sport activities, where injury to any part of it cause stop athletes from participating in the games and to drop their level because of the presence of pain in the area of injury which lead to lower their technical level depending on the type and degree of injury, and since this joint considered an animate part of the human body so it needs to diet and movement as flexion and extension and the accompanying contraction and relaxation of the surrounding muscles as the basis for its ability to give more and more, therefore its necessary to focus on the therapeutic curriculum for this joint with the type of injury and the way of Opening of knee either endoscopic or surgical, the indicators that can be inferred by the level of the change in the body of the patient are biochemical variables and physical characteristics and the range of motion

2. RESEARCH OBJECTIVES

- 1- preparation a rehabilitative approach for the rehabilitation of the injured (injury medial meniscus) of the knee joint to identify the differences between the physical variables and range of motion before and after the endoscopic operation and after rehabilitative approach
- 2- Understand the differences between chemical indicators before and after the endoscopic operation and after rehabilitative approach

3. RESEARCH HYPOTHESES

- 1- The existence of differences between the physical variables and range of motion before and after the endoscopic operation and after rehabilitative approach and in favor of tests and measurements after rehabilitative approach
- 2- There are differences between the chemical indicators before and after the endoscopic operation and after rehabilitative approach

4. RESEARCH METHODOLOGY

The researcher used the experimental method to solve the problem of his research and it is the nearest for solving problems by intentional way so the researcher and before doing the study should choose an experimental design to test the validity of the results derived from his hypothesis (2: 1973, p 256)

5. RESEARCH SAMPLE

In order to access to accurate search results, the researcher must choose the sample by the intentional way. The number of injured athletes with medial meniscus during that period (8) mathematically, where the researcher rule out a number of respondents who have other injuries in addition to the meniscus injury. The sample ranged in age between (18-25) years

For the diagnosis of injury, the researcher prepare a preliminary form contains a set of preliminary information gives the initial idea to bring a sample of the patient and make some initial measurements (height and weight). In order to verify that the sample was distributed normally in some of the variables related to the topic of research

and that have a clear impact on the validity and accuracy of the results, the researcher conducting homogeneity of the sample and, as shown in table (1).

Table 1 shows the mean, standard deviation and coefficient of variation and coefficient of torsion of the research sample

Sequence	variables	Unit of measurement	The arithmetic mean	Standard deviation	coefficient of variation	coefficient of torsion
1	length	cm	174.500	5.15475	2.953	0.801
2	weight	kg	70.000	6.54654	9.351	0.000
3	Training age	year	6.8750	0.99103	14.414	0.862-
4	Flexion of knee	degree	129.125	3.226	2.498	0.361
5	Extension of knee	degree	162.500	2.878	1.771	0.479
6	The rapid force - belly	The number of times	7.125	1.356	19.031	0.294-
7	The rapid force -half debna	The number of times	8.250	1.488	18.036	1.217-
8	The rapid force – complete debna	The number of times	7.125	1.246	17.487	0.304-
9	Endurance force- belly	The number of times	23.250	4.920	21.161	0.270
10	Endurance force – half debna	The number of times	29.125	3.181	10.921	0.187-
11	Endurance force – complete debna	The number of times	25.375	3.502	13.800	0.089
12	Pain killer- beta endorphin	mili-ter/pikogram	221.375	34.574	15.617	1.986

In order to ensure that the research sample was distributed normally, the researcher conducting homogeneity of the sample (meniscus cartilage) as in Table 2

Table (2) Shows arithmetic means and standard deviations and the values of the coefficient of variation and coefficient of torsion of a sample (meniscus cartilage) after the endoscopic procedure in research variables

Sequence	variables	Unit of measurement	The arithmetic mean	Standard deviation	coefficient of variation	coefficient of torsion
1	Flexion of knee	Degree	133.750	2.549	1.905	0.733
2	Extension of knee	degree	170.125	4.0155	2.360	0.069
3	The rapid force - belly	Number of times	8.375	1.505	17.970	0.518
4	The rapid force – half debna	Number of times	10.625	1.060	9.976	0.045

5	The rapid force – complete debna	Number of times	9.125	1.552	17.008	1.188
6	Endurance force- belly	Number of times	28.375	5.262	18.544	0.156
7	Endurance force- half debna	Number of times	35.875	3.399	9.474	0.411
8	Endurance force – complete debna	Number of times	34.750	4.166	11.988	0.219
9	Pain killer- beta endorphins	mili- ter/pikogram		198.500	21.132	10.645

It was used the coefficient of variation and coefficient of sprains as a means of statistical processing for treating the physical variables and range of motion and atrophy of femoral muscle working on the affected knee and pain killer after the endoscopic procedure, and Due to the coefficient of variation not exceed of class (30), and also coefficient of torsion, which is limited to a value between (+ - 3), which reflects the homogeneity the sample in those variables and it is distributed normally

6. THE SUGGESTED REHABILITATIVE CURRICULUM

The researcher prepared rehabilitative curriculum to develop some physical characters and range of motion, pain-killer and for rehabilitation athletes injured with knee joint after the eradication of the medial meniscus. Where the researcher did the application of the curriculum (for the injured meniscus medial) of the injured athletes, between the day and the last, and the rehabilitative curriculum of the cartilage include on (24) rehabilitative unit , and the duration of each unit (50-90 minutes), with the knowledge that the roll-out curriculum begins after four weeks of the operation, after injured athlete finished the initial phase initial after the endoscopic operation which are at the center of the martyr Qais Abdul Majeed for medical rehabilitation and physical therapy through the use of exercises of isometric and isotonic and with little weights and resistances through physiotherapist specialist for the rehabilitation of injured athletes at this stage. the researcher Has taken into account within the curriculum easy to difficult and simple to complex with the gradual increase weight, also taking into account the principle of gradient in the training load , also the researcher took into account the intensities of exercises used as well as the severity of the rehabilitative unit completely , the researcher also used in his curriculum the pressing bands to prevent swelling (bloody effusion) in the knee joint and allow the tissue in the area of operation of the rapid healing . As a researcher used in his curriculum the stretch and at two periods before the start of the rehabilitative unit At the end of the unit , as well as the use of refresher warm-up exercises and abdominal exercises as well as the use of exercises (winding running) and it is a good test for the movement of the cartilage inside the joint and use the exercises typical in the warm-up as well as the use of the bar and sticks and Dumbbells and light weights before the start of the unit to prepare the injured for the performance of the rehabilitative unit and the ability to lift weights in the rehabilitative unit, as the researcher using the bags and ice bottles after the end of each unit in the curriculum for each injured.

7. PRESENTATION AND DISCUSSION THE RESULTS

Presentation and discussion of analysis of variance (F) of the physical and biochemical variables (before and after the operation and after the curriculum) of the medial meniscus

Table (3) shows the results of analysis of variance (F) between the measurements and tests of physical and biochemical variables and determinants of movement (before and after the operation and after the curriculum)

sequence	Variables	Sources of variation	Sum of squares	The degree of freedom	Average squares	The calculated value of (F)	Statistical significance
1	The range motion of the knee-flexion	Between groups	351.583	2	175.792	26.678	significant
		Inside groups	138.375	21	6.589		
2	Range of motion of the knee - extension	Between groups	870.583	2	435.292	36.804	significant
		Inside group	248.375	21	11.827		
3	Rapid force of belly	Between groups	146.333	2	73.167	27.622	significant
		Inside group	55.625	21	2.649		
4	Rapid force – half debna	between groups	85.583	2	42.792	29.707	significant
		Inside group	30.250	21	1.44		
5	Rapid force – complete debna	Between groups	96.083	2	48.042	28.220	significant
		Inside group	35.750	21	1.702		
6	Endurance force - belly	Between groups	883.583	2	416.792	15.591	significant
		Inside group	561.375	21	26.732		
7	Endurance force – half debna	Between groups	1463.583	2	731.792	25.623	significant
		Inside group	599.750	21	28.560		
8	Endurance force – complete debna	Between groups	1706.250	2	853.125	41.531	significant
		Inside group	431.375	21	20.542		
9	Beta endorphins	Between groups	190458.3	2	95229.125	162.546	significant
		Inside group	12303.030	21	585.859		

Tabulated f under the level of significance 0.05 and degree of freedom (2-21) = 3.47

Through the table (3) shows the results of the values of calculated F to measure the range of motion of the knee (flexion - extension) Report (26.678 to 36.804), which is the more than the Tabulated value of F, the level of significance (0.05) and the degree of freedom (2-21), demonstrating the presence of significant differences between the results of tests of motion range of the knee (flexion - extension) (before and after the operation and after the curriculum). While the results of calculated F in tests of physical variables of rapid Endurance

(of the abdomen - the two legs – half dbna , full Dbna), respectively (27,622 - 29.707 to 28.220), which is more than the tabulated values of F

Under the level of significance (0.05) and the degree of freedom (2-21), demonstrating the presence of significant differences between the results of rapid Endurance

Tests (of the abdomen - the two legs dbna , Dbna full) (before and after the process and after the curriculum), have reached results F) . the results of calculated F in variable physical tests For Endurance force (of the abdomen - the two legs half dbna, Dbna full), respectively (15,591 - 25.623 to 41.531), which is more than the values of tabulated F under the level of significance (0.05) and the degree of freedom (2-21) which means that there are significant differences between the results of stretch force tests (of the abdomen - the two legs half dbna, Dbna full) (before and after the process and after the curriculum) while the value of calculated (F) for the painkiller beta endorphins (162.546), which is greater than the value of Tabulated (F) below the level of significance (0.05) and the degree of freedom (2 - 21), demonstrating the presence of significant differences between the results of measurements of painkiller beta endorphins (before and after the operation and after the curriculum) for a medial meniscus.

In order to find out which tests are better than the other, the researcher used the test with less significant difference (LSD) which is shown in Table 4.

sequence	variables	groups	Deferens between means	Results of differences	Value of L.S.D		Statistical significance
2	Motion range of knee – flexion	G1-G2	129.125-133.750	4.625	3.231	2.208	significant
		G1-G3	129.125-138.500	9.375			significant
		G2-G3	133.750-138.500	4.75			significant
3	Motion range of knee – extension	G1-G2	162.500-170.125	7.625	4.329	2.958	Not significant
		G1-G3	162.500-177.250	14.75			significant
		G2-G3	170.125-177.250	7.125			significant
4	Rapid force of belly	G1-G2	7.125-8.375	1.250	2.048	1.400	significant
		G1-G3	7.125-12.875	5.74			significant
		G2-G3	8.375-10.625	4.49			significant
5	Rapid force of legs – half dbna	G1-G2	8.250-10.625	2.375	1.510	1.032	significant
		G1-G3	8.25-12.875	4.625			significant
		G2-G3	10.625-12.875	2.25			significant
6	Rapid force of legs – complete dbna	G1-G2	7.135-9.125	1.99	1.642	1.122	Not significant
		G1-G3	7.135- 12	4.865			significant
		G2-G3	9.125- 12	2.875			significant
7	Endurance force- belly	G1-G2	23.250-28.375	5.125	6.508	4.448	significant

		G1-G3	23.250-37.500	14.25			significant
		G2-G3	28.375-37.500	9.125			significant
8	Endurance force for legs – half dbna	G1-G2	29.125-35.875	6.75	6.727	4.597	significant
		G1-G3	29.125-48.000	18.875			significant
		G2-G3	35.875-48.000	12.125			significant
9	Endurance force – full dbna	G1-G2	25.375-34.7500	9.375	5.705	3.899	significant
		G1-G3	25.375-46.000	20.625			significant
		G2-G3	34.7500-46.000	11.25			significant
10	Beta endorphins	G1-G2	221.375-157	64.375	30.468	20.824	significant
		G1-G3	221.375-625.8	212.75			significant
		G2-G3	157-8.625	148.375			significant

Through the presentation of the variables in Table 4 note the development is clear in muscle power (speed-strength) and in favor of the test after the curriculum and researcher attribute the reason for this development to the nature of the curriculum and the therapeutic units in a scientific images of and how to manipulate with the severity, size, and time where researcher began fixing time (30 seconds) when you get to the severity (75%) and they arrived to the intensity of (100%), where the increase in weight and duplications which reach to (15) recurrence and this led to a state of adaptation of the nervous system and the flexibility of the motor nerves as a result of duplications performed by the injured athlete which transfer nervous stimulations and the occurrence of the process of muscle contraction of the muscle as well as acts of reflectivity and what the muscle contain of spindles to reach the brain the limits of contraction and thereby increasing in the speed of muscle contraction as a result of an increase greater number of muscle fibers by progression and overload .

the progression (or overload) states that the adjustment of output and hence the increase in the potential functional ability are equal to the size of the load while the second gradient base dictate to the practitioner to increase the training load gradually, so as to ensure occurrence of adaptation in the muscle itself, and thus training exercise of muscle strength done at high speeds, in order to simulate what happens in most sports movements on the ground, which helps the occurrence of required neuromuscular adjustment .

As a rule known in regular training leads to prior nervous adaptation then muscular adaptation and this was confirmed (5: 192) that the nervous system responds by type of contraction (0.3: 2012 'pp. 97-98) and through the display and analysis of stretch force ,noticed the preference of tests after the curriculum and this is due to the nature of the curriculum and its contents of therapeutic units and how to climb the duration of time of therapeutic units, starting from (58 minutes to 91 minutes) which lead to the development of endurance strength as well as the increase in the number of groups and duplicates the content of the exercises in the therapeutic unit and that led to physiological changes in muscle and its ability to withstand fatigue as well as the evolution in the circulatory and respiratory systems as it is "when you use a motor contraction must take muscle range of full motion, which led to secure full nerves of muscle, and thus muscular contraction by shortening and elongation work positively to stimulate and improve the functioning of the circulatory system and muscular system in the direction of endurance

for the understanding of factors that are complementary to each other. (4: 199 'p. 122), and when analyzing the results (LSD) to identify significant differences in arithmetic means for the variable of painkiller (beta endorphin) offered by the table (9), showing that the results of the differences between tests before and after the process was (64.375), which is greater than the value of LSD under the level of significance (0.01) and adult (30.468), which indicates the presence of significant differences between the two tests before and after the process and in favor of the test after the operation

It turns out that the results of the differences between the two tests before the operation and after the curriculum was (212.750), which is greater than the value of LSD under the level of significance (0.01) and adult (30.468), which indicates the presence of significant differences between the two tests before the operation and after the curriculum and in favor of the test after the curriculum, and show that the results of the differences between the two tests after the operation and after the curriculum was (148.375), which is greater than the value of LSD under the level of significance (0.01) and adult (30.468), which indicates the presence of significant differences between the two tests after the operation and after the curriculum and in favor of the test after the curriculum, and also noted from this that the test after the curriculum to the variable painkiller (beta-endorphin) was the best. the researcher Attributed this development which happened to members of injured athletes by detecting the extent of their arrival to the healing phase or the closest to heal by the pain expressed by the painkiller (beta endorphins) which the pituitary gland responsible of it, where secreted when there is pain in the body in order to try to curb this pain when excreted significantly demonstrates the presence of pain and this is what we have observed in measurements before and after the operation and after the curriculum where it began after the curriculum secrete a few amounts which demonstrates the arrival of injured athletes to the stage of healing By strengthening the muscles and ligaments surrounding them and increase their efficiency and thus stopping pain and decrease secretion of endorphins. (8: 2009, p 130)

8. CONCLUSIONS

- 1- rehabilitative approach has effect in returning the motion range of knee joint and get rid of muscular atrophy of femurs and reduce pain
- 2- There are differences between the physical variables addressed by the research between the three tests (before the operation and after the operation and after the curriculum) and in the favor of after the curriculum which demonstrates the improved neural signal and increase the number of operating motor units
- 3- There are differences between the range of motion in the three measurements (before the operation and after the operation and after the curriculum) and in the favor of the after curriculum and it refers to the return of the safety of the affected joint and remove the motor range
- 4- The results of some of the physical variables and range of motion refers to some evolution after the endoscopic operation (meniscus cartilage) resulting from the therapeutic curriculum
- 5- drop out of training before the endoscopic procedure due to injury showed the results of weakness and atrophy of muscle groups working on the knee joint as well as to determine the Identification of the joint

REFERENCES

- 1- Abul-Ela Ahmed Abdel Fattah: training sports and physiological bases, Dar Al- Fikr Al- Arabi i 1, Helwan University, Cairo, 1997
- 2- Ahmed Badr: Origins of scientific research and its methods, i 1, Kuwait, agency of publications 0.1973 m,



- 3- Hazza Bin Mohd Al-Hazza : Selected Topics in physiology of activity and physical performance, i 1, Riyadh, 2012
- 4- Bastawisi Ahmad: principles and theories of training sports, Dar el Fikr al Arabi, Cairo, 1996
- 5- Louay Kazim: the effect of rehabilitative curriculum on according to the bio- rhythm in some physical attributes and range of motion and bio-chemical variables after the eradication of the cartilage of the knee joint, doctoral thesis, 2010
- 6- Marwan Abdel Majid Ibrahim: descriptive statistics and inferential, i 1, Oman, Dar el fikr for printing and publishing, Distribution 0.2000 m
- 7- Majid Al Majali, Ziad Ermala: The effect of using bullet massage and therapeutic exercise in the rehabilitation of injured with disc in the cervical vertebrae of the spine. Scientific Conference of the sixth athlete. Amman. Jordan. 2009 pp. 130
- 8- Komip V. Strcnyht and power in sport the Olympic book of sport medicint. Blake werll scientific publication Germany. 1992

Address for correspondence:

Author: Dr.Qusai Salih , inst.Assistant , collage of physical education , basrah university

E-mail: qusaimallah@yahoo.com

THE IMPACT OF PLYOMETRIC EXERCISES IN DEVELOPING THE EXPLOSIVE POWER OF LEG MUSCLES AND OPENED JUMPING ON VAULT TABLE

* Dr. Ferdous M.Ameen , ** Dr. Marseel Zaia Yalda , *** Dr. Sura Jamil Hanna

* Diyala University / Physical Education College

** Duhok University / Physical Education College

Abstract

The athletic training aim to improve the achievement level weather skilled or physically in games, sports and all other athletic activities. The physical characters acquired a great interest in designing the training course, that side by side the setting of the skill and tactical and the psychological sides considering them as the chief targets in the readiness and preparedness of preparation for sports. The requirement of the physical setting of gymnastics include development of its physical properties in order to integrated for a player or a student that lead to competition stage and these qualities include strength from such as explosive strength characteristic speed and loading which constitute a significant factors in the motor performance of the player games during the competition that require skilled performance characterized with force, such as jumping. The explosive power is one of following question: Do posses a suitable explosive force enables to perform jumping skill on the opened platform and whether the explosive force impacts on them? The study aimed to identify the effect of plyometric exercise in the development of the explosive power of the leg muscles and opened jumping on platform. Significant differences were found between the two measurements of pre and post tests for both experimental and control groups. No significant differences between the two post tests for the control and experimental groups. The second stages student of the Faculty of Physical Education / University of Diyala, of their number (20) student. For the period 17/02/2013 - 10/04/2013 in artistic gymnastics hall of the Faculty of Physical Education / University of Diyala.

KEYWORDS : POLYMATRICES . EXERCISES . JUMPING EXPLOSIVE .

1. INTRODUCTION

The goal of the athletic training is to raise the level of achievement weather physiologically or skillfully in games and in all the athletic activities. The physical characteristics gained a great interest in the designing of the training courses side by side to all other. Settings and preparations considering them as the main goals in the athletic setting, the requirements of the special setting for the gymnastics activities to develop the special physiological characters to be complete for the player during the competition stage, these characters include the strength, the explosive power, fastness and the bearing. For the female players caring with the developing the strength push to use the plyometric exercises in the field of the athletic training, these exercises participate greatly in developing the explosive power. [Bastosi Ahmed 1999] insisted on this idea and said. The plyometric exercises improve the movement power and the rubbericky power, this has a great effect on developing the explosive power. The exercises of plyometric helps greatly in developing the muscles and nervous systems to do the contradict exchanges by

increasing the power and fastness in different activities like, volleyball, basketball, handball and the runners of the short runs in addition to the jumping. All these activities in bad need to the explosive power from this point this thesis gave the developing of the explosive power a great and big importance specially for the legs of the players by the plyometric exercises to develop the working muscles in the opened jumping on the Vault Table.

The problem of the thesis answer clearly on the following questions. Do having the suitable explosive power make the female student able for achieving the opening jumping skill on the Vault Table? Do the explosive power has any affection on this?

While observing the level of female students of the second stage of gymnastic in the colleges of the physical education. The searchers noticed the weakness in the skill of opened jumping on Vault Table that leads to the decreasing in the level of the female student in gymnastic. This made the searchers to study this problem in the college of physical education in Diyala University by: -

- Designing plyometric exercises to develop the explosive power for the legs muscles and the skill of opened jumping on Vault Table.
- Discovering and finding the affection of these plyometric exercises in developing the explosive power for the legs muscles and the skill of opened jumping on Vault Table.
- There are statistical significant differences in the skill exam and the explosive power exam for the leg in the pre and post exam for the chose sample.
- There are statistical significant differences in the post exam for the two groups in the explosive power and the skill of opened jumping.

2. MATERIALS AND METHODS

The searchers used the experimental course because it is the most suitable for this research, and it is a method to control all the basic factors effect on the variations concerned with the experiment, that expect one factor, the searcher care too much to change it to limit and fix its affection on the other variations, because it is accurate in the results comparing with other results.

The goals and procedures which the searcher put and used will fix the nature of the sample of the research. The research include female student of the second stage from the physical education in Diyala University, they are (60) students. The sample of the research is of (29) female students, nine students were refused for reasons of failure and injured, so the sample become (20). These female students were chosen randomly and by lot and they were divided into two groups (10) for the criterion group and the other (10) for the experimental group.

Table (No 1) shows that the two samples were equal because the possibility of any mistake for all the characters of the two samples more than (0.05).

The pre-exams for the sample of the research were done on Tuesday 19/2/2013 in the Gymnastic hall of the physical education college in Diyala University. The searcher fixed the special circumstances for making the exams and the used procedures in addition of selecting the assistant working team to achieve the needed circumstances as much as possible. The searchers followed the followings steps:

- The searcher explained the exams in details to the members of the sample.
- All the exams were applied by the searchers, that to enable the members of the sample to do them perfectly.
- Giving enough chance for warming up for be ready for the exams.
- The results were registered according the conditions and specifications of each exam.

To achieve the goals of the thesis, the searchers put a training program include the plyometric exercises aim to develop the explosive power for the leg, that depending on the plyometric exercises which are suitable for the female sample of students and to apply this program on the experimented group that supervised by the lectures of the subject, while the criterion group applied the program of the college through the public sector for the ministry of Higher Education and Scientific Research for the college of physical education by the supervision of the lecturers of the subject:

The application for the program lasted for (4) weeks from Wednesday (20/2) up to (2013) by two training units weekly and for (60) minutes.

The two others (Abo AL-Ula Ahmed 1993) and (Yasser Daboor 1997) declare that doing the plyometric exercises at the end of the training units for the high tension that bring up the highest power from the female students.

The post exam for the sample done on (21/3/2013 Thursday), the searchers followed the same conditions of the pre exam in place, time and the used instruments. The searchers depend on the statistical package (spss).

3. RESULTS

This chapter included showing the results pre and post the exam for the two groups (the criterion and experimental groups). The results were put in tables, at the same time comparing the differentiations between them to reach the final results, then to discuss these results to reach the achievement of the goals of research and to reach the law the percentage (TT) to know the development for the two groups.

Table (1) the table shows the variations and the deviation (T) and the value of (T) accounted for the two pre and post exams for the criterion group

Result	Significance level	Calculated T	Post		pre		Statistical Features The variations
			Standard deviation	Mean	Standard deviation	Mean	
significant	0.02	4.33	14.92	150	14.76	147.90	Explosive power For legs
significant	0.037	2.44	0.78	4.50	0.78	430	Skill

The value of (T) under degree of (9)

This result prove the correctness of the hypothesis which refer the differentiation between the two exams pre and post for the criterion group

Table (2) this shows the average of differentiation and the value of (T) accounted for the two exams pre and post for the experimental group

Result	Significance level	Calculated T	Post		pre		Statistical Features The variations
			Stander division	Mean	Standard division	Mean	
Significant	0.02	5065	14.75	156.50	14.65	148.30	Explosive power For legs
Significant	0.04	11.50	1.30	6.45	0.85	4.15	Skill

Table (2) shows that these results prove the correctness of the first hypothesis, which refer to the variations of statistical indication pre and post the exams for the experimented group. The searcher mention that using the plyometric exercises for developing the explosive power for the legs in the accurate way affected greatly in developing the explosive power for the muscles of the legs, which reflected positively on the skill of opened jumping on the Vault Table.

Table (3) this shows the averages and the standard deviation and the value of (T) for the groups of research in the post exam.

Result	Significance level	(T) value	Experimental		control		Unit of measurement	Statistical Treatment
			SD	A	SD	A		
significant	0.02	4.33	14.92	150	14.76	147.90	CM	Explosive power For legs
significant	0.037	2.44	0.78	4.50	0.78	430	Degree	Skill

From table (3) shows the development for the two post exams between the two groups. This prove the hypothesis, the searchers said that this development is the result of the accurate plyometric exercises which lead to the development of the explosive power for the two legs that develop greatly the skill of the opened jumping on the Vault Table.

The plyometric exercises works affectively to develop the explosive power and these exercises are considered one of the most effective and [AL-Raidi - 2004 (232-233)].

4. CONCLUSIONS

- 1- The good organizing for the used plyometric exercises in the research and to give step by step in the difficulty in doing the items of the course by the female students.
- 2- The development of the explosive power for the legs muscle affected positively on the opened jumping on the (Vault Table).

5. RECOMMENDATIONS

Depending greatly on the plyometric exercises in the training courses for the female students that insure the explosive power.

- 1- Caring with the development of power because it is an important sort of muscle power and it has direct affection on some basic skills.
- 2- Furnishing the needed equipment for making the plyometric exercises and using them in a scientific way.
- 3- Encouraging the trainers for caring with the plyometric exercises to develop the movement skills.
- 4- The training by using the plyometric method is an addle way for all the games which need the muscle power (explosive power). Here the users must care with the basic advice of training.

REFERENCES

- 1- Abo AL-Ola Ahmed and Ahmed Naser AL-Dein Body fitness physiology [Cairo - 1993].

- 2- The International law for technical gymnastic for ladies - from 2013 - translated by (Ferdos Majeed Amen) - second edition - The central press - Diyallah University - Baghdad 2014.
- 3- Bastosi Ahmed - Baises and theories of athletic training [Cairo - Dar AL-fiker al-Arabi - 1999].
- 4- Jabir Abdul Hameed and Ahmed Khairee courses of research ion education and phycology (Cairo - Dar-ALNada AL-Arabia 1986).
- 5- A Group of Arabs lingual - [The basic Arabic Mojem] [The Arabic organization for culture and Education].
- 6- Hussain Ali AL-Ali and Fakher Shaghatai [The plyomatric and the explosive power exercises] (Baghdad - AL-Karrar office for printing 2006).
- 7- AL-Rabdi Kamal Jameel (2004). The sportial training for the twenty first century). The second edition - Dar Wael for printing - Jordan - Aman.
- 8- Norri AL-Shook and Rafee 'AL-Kobaisi. The Guide of researches for writing thesis in physical Education. Baghdad 2004.
- 9- Allen [Edward: statically method: 2nd. Holt Rinehart and Winston Inc New York] 77.
- 10- Radcliff, James and farentions, Robertc plyomatrics explosive power training Illinois human kinetics publishers, 1985.

Address for correspondence:

Author: Dr. Ferdous M.Ameen. Diyala University / Physical Education College

E-mail: dr.ferdousameen@yahoo.com

THE IMPACT OF THE COMPOUND TRAINING FOR THE DEVELOPMENT OF CERTAIN TYPES OF MUSCULAR STRENGTH AT THE LEVEL OF ACCOMPLISHMENT RUN 200 METERS FOR DISABLED (DEAF AND DUMB)

* Dr. Kamel Abboud Hussein , ** Dr. Alaa khalaf Haider , *** M. Walid Jalil Ibrahim.

*, **, *** Diyala University - Faculty of Physical Education.

Abstract

The diversity of training ways and its methods is one of the important reasons that prompted scientists to study it and work to push them towards the renewal and development which commensurate with the potential and human capacity and that these methods and techniques put set of objectives like suitability for each game or activity where they have uneven effect that putted by specialists within their plans for the development of all the physical characters and appeared so obvious as a result of the development of the physical level that need development many recipes which consistent with the privacy of the game, where represents the essential physical abilities such as muscle strength , speed-strength where the various methods of training make to raise the level of those capabilities through the dynamics of working with training components.

Hence the importance of research appear in the workout the style of compound training that ensue in which weights training and the biometric exercises "which must be the intensity is high for both weight training and the biometric This means that the volume should be low enough

The objectives of the research are putting exercises in compound style to develop explosive strength and speed-strength development and achievement run (200 meters) for the disabled category (deaf and dumb). As well as identify the impact of the compound trainings in the development of explosive strength and speed-strength accomplish run (200 meters) for the disabled category (deaf and dumb).

The researchers put their hypotheses, which stipulates the presence of statistically significant differences in the pre and posttests in the development of explosive strength and speed-strength for the two groups of control and experimental research. Also the presence of statistically significant differences in the post tests in the development of the explosive strength of speed-strength and in favor of the experimental group.

It was one of the most important results is that the use of the compound training (exercises of the biometric weighting in the development of performance run 200 meters contributed to the development of muscle strength of all kinds and thus achieve the goals of the research hypotheses. As well as the training curriculum that was used had a positive effect and has a effective in the development of muscle strength which is reflected in the performance skills of the stages of jogging.

KEYWORDS: DISABLED. DEAF. COMPOUND. TRAINING, MUSCULAR.

1. INTRODUCTION AND IMPORTANCE OF THE RESEARCH

The sports for the disabled and what present under its banner of many sport games is one of the sports that has seen developed and based on scientific research and objective study which aimed to integrate the individual to society and to increase interaction and interest in all aspects of physical, psychological and mental health which is "the best way and the best to speed the return of the disabled to society and corrupted again with him and his success as an individual producer members of this community integrated and interacting with it, the diversity of training ways and its methods is of one of the important reasons that prompted scientists to study and work to push it towards the renewal and development commensurate with the potential and human capacity and that these methods and techniques put set of objectives like suitability for each game or activity where they have uneven effect putted by specialists within their plans towards the development of all the physical attributes and appeared so obvious as a result of the evolution of the physical level that need to the evolution of many recipes and consistent with the privacy of the game, which represents the essential physical abilities such as muscle strength speed-strength where the different training methods make to raise the level of those capabilities through dynamic work with training components.

Hence the importance of research appear in the workout the style of compound training that ensue in which weights training and the biometric exercises "which must be the intensity is high for both weight training and the biometric This means that the volume should be low enough

2. RESEARCH PROBLEM

Through research and investigation in the sources and the Internet, the researchers found that there is a method proved successful in other areas, namely the compound training, which depends on the performance of overload exercises followed directly by the biometric exercises to develop explosive strength and speed-strength effectiveness in the long jump for the disabled. And the development level of achievement through the development of all kinds of force which is necessary for this event and its technical components and hoping that we will have to solve the problem of the research and upgrading of physical players.

3. RESEARCH GOALS

1. Putting exercises in compound style to develop explosive strength and speed-strength and the development of achievement run (200 meters) for the disabled category (deaf and dumb).
2. Understand the effect of compound exercises to develop explosive strength and speed-strength accomplish run (200 meters) for the disabled category (deaf and dumb).

4. RESEARCH HYPOTHESES

1. There are significant differences in the pre and posttests in the development of explosive strength and speed-strength for the two groups of control and experimental research.
2. The presence of statistically significant differences in the post tests in the development of the explosive strength of speed-strength and in favor of the experimental group.

5. RESEARCH METHODOLOGY

The researchers used the experimental method as being more appropriate approaches to solve the problem research

6. RESEARCH SAMPLE

Is to select a sample search by intentional way from the parolambah players in Diyala province , category (deaf and dumb) in the effectiveness of the long jump and the number (8) , the homogeneity made by coefficient sprains variables (weight, age ,the training age) and the sample divided into two groups .

Table (1) demonstrates the homogeneity of the sample in some of the variables

Indicators	The unit of measurement	Arithmetic mean	Standard deviation	Mediator	Coefficient of sprains
Weight	Kg	65.25	1.35	65.54	1.01
Training age	year	5.75	0.75	5.50	0.755
Height	cm	168.45	1.707	168.75	0853

7. FIELD PROCEDURES OF THE RESEARCH

After doing the tribal testing on research sample, the researchers apply the curriculum prepared by them, which is an compound exercises with the use of weighting tools (pectoral weighting, and guitar for the arms as well as legs also contain weighting) also using the biometric exercises for the research sample for 60 day rate (3) training units per week, and after completion the application of curriculum, a posteriori tests of a sample research has been done to find out the extent of development in muscle strength and accomplishment for deaf and dumb runners.

Exercises used in the specimen module (Appendix 1) the researchers took into account the following:

- A- Preparing physical exercises to develop muscle strength (explosive power and speed-strength)
- B - Giving exercises in the main section in the curriculum prepared by the researchers
- C- The intensity of exercises between 65% 75%

The researchers relied on the pulse as an indicator of interfaces comfort between duplicates and between groups, as the number of heart beats between duplicates (130-140 beat per min), which is equivalent in time (3-4) minutes. While the intensity of the biometric exercises between 80% - 90% and repeat (2) for each exercise, which has been applied in a manner of periodicity training with high intensity

- D – The rest between groups was between (110-120 beat per minute), which is equivalent in time of (4-5) minutes
- E – Exercises should be given successively of the arms and legs, taking into account the conditions and characteristics of the compound training with changing rates and volumes and the rest which convenience in line with the research sample, and their level of training.

8. DISPLAYING RESULTS, ANALYZING AND DISCUSSING THEM

Research data were handled statistically using the search program (spss) to extract the ratio of development between tribal and posteriori tests

Table (2) Shows the arithmetic mean, standard deviation and the value of calculated and tabular (T) in the tribal and posteriori tests for the experimental group for the development of certain types of muscle strength at the level of accomplishment run (200 meters) for the disabled (deaf and dumb)

Tests	Unit of measurement	The tribal measurement		The posteriori measurement		The value of calculated T	The value of tabulated T	The level of significance
		S	D	S	D			
Test of broad jump	distance	2.58	1.35	2.96	0.40	7.49	3.18	significant
Test of throwing a medical ball weighting (4 kg) from the chest to the	distance	4.59	0.42	5.31	0.39	3.75	3.18	significant

farthest distance								
Test of flexion and extension of the knees in 20 seconds	duplication	15.50	0.57	19.75	0.95	8.87	3.18	significant
Test	Time	25.31	0.29	24.57	0.42	4.11	3.18	Not significant

With degree of freedom (3) and the probability of error (0.05)

Shown in Table (2) that the arithmetic means in the pretest variables, Effect of compound training for the development of certain types of muscle strength at the level of accomplishment run the 200 meters for the disabled (deaf and dumb)

broad jump test, throwing a medical ball from the chest to the farthest distance, bending and extending the knees in 20 seconds, the test of completion run 200 meters) of (2.58) (4.59) (15.50) (25.31), respectively, and the deviations of standard of (1.35) (0.42) (0.57) (0.29) respectively

While the arithmetic means in the post-test in the variables under the same compound training effect for the development of certain types of muscle strength at the level of accomplishment run the 200 meters for the disabled (deaf and dumb) (broad jump test, throwing a medical ball from the chest to the farthest distance, bending and extending the knees in 20 seconds, completing the test run 200 meters) of (2.96) (5.31) (19.75) (24.57), respectively, and standard deviations of (0.40) (0.39) (0.95) (0.42) respectively

The total values of calculated (t) (7.49) (3.75) (8.87) (4.11), while the value of tabular (t) (3.18) at the level of significance (0.05) and in front of the degree of freedom (3), and since the calculated value is greater than the tabular this indicates that the moral differences between pre and post- tests in all the variables under consideration the impact of the compound training for the development of certain types of muscle strength at the level of accomplishment run the 200 meters for the disabled (deaf and dumb) and in the favor of the post test

The researchers attribute that these significant differences are due to the training curriculum has included vocabulary helped to use loads and different intensities for the development of muscular strength with tighten (65-75% of the weighting exercises) (80-90% of the biometric exercises) than the maximum that an individual can accomplish Which led to the achievement of the increase in the load enough to stimulate physiological processes as well as duplicates of these exercises and the duration of the rest periods between repetitions and between groups has helped the development of speed-strength for the development of own muscle strength and that the most important for muscles that depend on what the training cause for the type of used activity during the performance which will lead to achieve the feat in addition to the use of exercises that have a relationship to the development of this physical trait as that for this exercise, which included exercises for strengthening , for members of the experimental group considers that the use of high duplicates of special exercises have had a significant role in strengthening the abdominal muscles involved in performance and these exercises are within the principle of specificity of training that contributed to the performance of the test , as the results of the study confirms where carried out by the researcher (Abdul Razzaq Kazim) who emphasized "to use the method to develop own muscle strength through the use of exercises by the style of compound training and its impact was positive in the development of some special skills in addition the researchers believe that the speed-strength of the abdominal muscles are developed through exercises of power that have a role in the development of some of the skills that play where the abdominal muscles play an important role. " Abdul Razzaq Kazim al-Zubaidi 1999.91))

The researchers attribute the cause of development among members of the research sample to develop speed-strength to the muscles of the two leg is that the exercises used in the curriculum by using the biometric exercises In addition to the components of training load which used where researchers used some of the instruments and tools for the development of this trait as stated (Talha Hussein Hossam El Din) "The growth of muscle strength by using the exercises special for devices and tools outpaced the growth of some species" (Talha Hussein Hossamel dein, 1994.197)

Table (3), Shows the arithmetic mean, standard deviation and the value of calculated and tabular (T) in and pre and post tests and the control group for the development of certain types of muscle strength at the level of accomplishment run the 200 meters for the disabled (deaf and dumb)

Tests	Unit of measurement	Pretest measurement		Posttest measurement		Value of calculated T	Value of tabulated T	The level of significance
		S	D	S	D			
Test of broad jump	Distance	2.58	0.13	2.65	0.13	2.13	3.18	Not significant
Test of throwing a medical ball (4kg) from the distance chest to a farthest	Distance	4.59	0.04	4.78	0.08	3.30	3.18	significant
Test of bending and extension of the knees in 20 seconds	duplication	15.50	0.57	16.75	0.50	5.00	3.18	significant
Achievement test ran 200 meters	time	25.31	0.29	25.04	0.14	1.16	3.18	Not significant

with the degree of freedom (3) and the probability of error (0.05)

Seen from the table (3) that in arithmetic means in the pretest variables, Effect of compound training for the development of certain types of muscle strength at the level of accomplishment run 200 meters for the disabled (deaf and dumb)

Test of broad jump, throwing a medical ball from the chest to the farthest distance, bending and extending the knees in 20 seconds, the completion test (run 200 meters) of (2.58) (4.59) (15.50) (25.31), respectively, and the standard deviations of (0.13) (0.04) (0.57) (0.29) respectively

While the arithmetic means in the post-test in the variables under the research, the effect of compound training for the development of certain types of muscle strength at the level of accomplishment run the 200 meters for the disabled (deaf and dumb) (broad jump test, throwing a medical ball from the chest to the farthest distance, bending and extending the knees in 20 seconds, completing the test run 200 meters) of (2.65) (4.78) (16.75) (25.04) respectively, and standard deviations of (0.13) (0.08) (0.50) (0.14) respectively

The total values of calculated (t) (2.35) (3.30) (5.00) (1.16), while the value of tabular (t) (3.18) at the level of significance (0.05) and the degree of freedom (3), and since the calculated value is greater than the tabular this indicates that the moral differences between pre and post tests and in the variables under consideration except test (broad jump test, and the completion of 200 meters) the impact of the compound training for the development of certain types of muscle strength at the level of accomplishment run the 200 meters for the disabled (deaf and dumb) and to the favor of post-test

Respecting to the lack of development of the achievement (lack of any significant differences in achievement test and researchers attribute the cause of that achievement cannot be developed through short periods of time because the work and continued exercise, higher technique of stages of rapid jogging needs skilled performance to achieve the feat, and also not to jump from stability. Researchers attribute that; the use of intensity according to the vocabulary of the curriculum for each athlete and to suit Oasis capacity identified between repetition and aggregates using training methods that make this medium is far from previous training methods. this type of training

is one of the exercises that can be used for each of the levels and ages, and by the possibility of and the ability of the individual sports, especially in games where the muscle strength is the leader of it

Through Table (3) observe the development of the control group in bending test and ball throwing test is due to the training using any method of training lead to the development of skilled level and its development and this is consistent with the views of many scientists and specialists in the field of sports training like (Mohammad Yousuf el Sheikh , Yassin al Sadiq, 1969.188) and (Mohammad Hassan Allawi, 1986.170) (Nader Abdul Salam Awamry, 1983.301) as they said "The training lead to improvement of the physical performance." As well as due to the attendance at the training and selection of the appropriate specialized exercises

Table (4) illustrates the arithmetic means and standard deviations and the value (v) of the a posteriori tests for the development of certain types of muscle strength at the level of accomplishment run 200 meters for the disabled (deaf and dumb) for the two experimental and control groups

sequence	Tests	Unit of measurement	The experimental group - dimensionally		The control group - dimensionally		The value of calculated T	The value of tabulated T	Significance
			S	D	S	D			
1	Test of broad jump	distance	2.96	0.04	2.65	0.13	4.27	2.45	significant
2	Test of throwing medical ball (4kg) from the chest to the farthest distance	distance	5.31	0.39	4.78	0.80	2.62	2.45	significant
3	Test of bending and extending the knees in 20 seconds	duplicating	19.75	0.95	16.75	0.50	5.55	2.45	significant
4	Achievement test ran 200 meters	time	24.57	0.42	25.04	0.14	2.05	2.45	significant

(*) Tabulated at 6 degrees of freedom and the level of significance (0.05)

By the results shown in Table (4) in the jump broad tests from stability for posteriori tests of the two sets of research has reached the arithmetic mean (2.96) and standard deviation (0.04) for the experimental group while the arithmetic mean of the control group was (2.65) and standard deviation (0.13) and For the purpose of testing the hypothesis which is concerning with the terms of the differences between the two posttests for the two sets of research ,the results has been processed statistically using the test of correlated samples, as the calculated value (4.27), which is bigger than tabulated value when the degree of freedom (6) the level of significance (0.05) equals (2.45) , since the calculated value bigger than tabular value so a significant difference between the two sets of research

With regard of throwing a medical ball of the posteriori tests, the arithmetic mean of the experimental group reached (5.31) and standard deviation (0.39) and the arithmetic mean of the control group was (4.78) and standard deviation (0.80), as the calculated value (2.62), bigger than the tabulated value equal to (2.45) Since the calculated value larger than tabular value so the difference is significant between the two sets of the research

In bending and extending test of the knees in 20 seconds in the post tests the arithmetic mean of the experimental group reached (19.75) and standard deviation (0.95) and the arithmetic mean of the control group reached (16.75) and standard deviation (0.50) as the value of calculated (T) (5.55), which is bigger than the tabulated value which is equal to (2.45), the difference between the two sets is significant in the post tests.

In Achievement test (run 200 meters) was the arithmetic mean of the experimental group (24.57) and standard deviation (0.42) while the mean in the post-test for the control group (25.04) and standard deviation (0.14), as the value of calculated (T) the (2.05), which is smaller than the tabulated value (equal to (2.45)), Since the calculated value smaller than the tabular value so not significant difference between post tests for the two sets of research

After noting the table (4) found that the experimental group is the better in the development than the control group in broad jump test , the researchers attribute that to the method of compound training used for the re-search sample and its success in developing the qualities of power (explosive and distinctive fast) with the strength of muscles of legs dramatically, so must attention to these groups through exercises performance and through the compound training method and a way of periodic training with high intensity and this is confirmed by (Mohamed Nasr El Din Radwan 1985.101), as was done with the maximum force and the shortest amount of time to for linking the power with speed and increase the interoperability ability between them and this is what runners characterized by (200 meters, which is found in the consistency of their performance and aesthetic by connecting the two components together)

In the test of throwing medical ball, the experimental group developed over the control group to the great . the attention given by the researchers to develop the strength of the arms and legs, which shows their impact in the development of skilled performance of the experimental group the greatest importance depending on the type of skilled performance, as there is a positive relationship between the strength of the arms and the level of skilled performance (run 200 meters), where the greater the strength of the arms whenever enables the player to control the coordination between body parts for the relative movement

The test of bending knees was development of the experimental group more than the control group , as agree with what the researchers was said (Muhannad Abdul Sattar, 2001.81) "There is a scientific fact to be a stand with it : the exercises used in the training curricula lead to the development of performance because it is built on a scientific foundations in organization the training process and the use of suitable load noting the individual differences and training under good conditions and under the supervision of trained professionals the training programs organized according to the scientific principles raise the physical and skilled level of the players. "This is confirmed by (Hanafi Mahmoud Mokhtar, 1998.97), "said the player who has strong muscles, can perform skill by force and speed in the game under the pressure of the body

The lack of development of the achievement (lack of significant differences in posteriori test between the two sets of research , researchers attribute the cause of that achievement cannot be developed through short periods of time because the work and continued exercise and high technique for stages of sprinting 200 meters needs skilled performance to achieve the feat for about a year, including the promise of exercises variety and limited according to the requirements.

9. CONCLUSIONS

1. The use of compound training (exercises of the biometric weighting and special in the development in the performance run 200 meters contributed to the development of different kinds of muscle strength and thus achieve the goals of the research hypotheses
2. The training curriculum that was used had a positive effect on the development of effective in the development of muscular strength which is reflected in the skilled performance for the stages of jogging

10. RECOMMENDATIONS

1. The need to emphasize that the exercises of the biometric weighting are similar to the skilled performance through motor track and the speed and muscle and participation of general muscles and their development in the exercise ran 200 meters.
2. Provide the necessary supplies to perform exercises and the biometric weighting and use them by scientific methods

REFERENCES

1. Alaa Fouad Saleh Alois, Master Thesis, the effect of exercise in the development of speed carrying and accomplishment ran 400 meters to runners aged 17-18 years, 2009
2. Abdul Razzaq Kazim al-Zubaidi; impact of proposed approach for own muscle strength in developing the performance of some of the own skills and requirements on the table of land movements on gymnastics players aged (13-15 years), PhD thesis (unpublished) Faculty of Physical Education, University of Baghdad 0.1999
3. Talha Hossam El Din Hussein; the motor foundations of sports training: (Cairo, Dar el fikr al Araby for Printing and Publishing, 1994)
4. Qais jeyad khalaf, khalaf Ala Haider 2013: Disabled Sports , methodology basics: Iraq, Diyala, Diyala Press Central 0.2013
5. Mohammad Hassan Allawi: The Science of sports training, first edition, dar el maarif, Egypt, 1986
6. Mohamed Nasr El Din Radwan: the impact of speed exercise on the ability of muscle of the arms and legs, a comparative study, Journal of Studies and Research, Volume 8, Helwan University, 1985
7. Mohammad Yousuf Sheikh Yassin and Yassin Sadiq: sports physiology and training, Dar elfikr al Araby , Alexandria
8. Mohamed Sobhi Hassanein: evaluation and measurement in physical education and sports, c 1, i 2, dar el fikr al araby, Cairo 0.1987
9. Nadir Abdul Salam Awamry: Effect interesting universe on the reaction, the Journal of Studies and Research, Issue 2, Helwan University, 1983
10. Nawal Mahdi Obeidi and others: athletic training, Library and Archives, Baghdad, 2009, p 137
11. Mohammad Ridaha Ibrahim: field Application, theories and methods of training, Baghdad, 2008, p 615.

Address for correspondence:

Author: Dr. Alaa khalaf Haider, Diyala University College of Physical Education.

E-mail: Alaakh.sport@yahoo.com