6 - EFFECTS OF A "MACRO PROJECT" FOR INTERVENTION IN TEACHING AND CLINICAL PARAMETERS OF SPECIAL COMMUNITY.

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INTRODUCTION

At least 60% of world population can not complete the recommended amount of physical activity needed to induce health benefits. This is partly due to insufficient participation in leisure physical activity and increased sedentary behavior during the professional and domestic activities. An increase in the use of means of transport "passive" has also been associated with declining levels of physical activity (1). The population with a disability, especially with intellectual disability (ID), have low levels of physical activity and there are few studies about the community that surrounds them.

A learning disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior, which includes many social skills and daily practices. This disability originates before the age of 18 years (2), has a prevalence of approximately 1% (3), with up to 2% of school age (4). In Brazil, about 1.6% of the population has this condition according to the IBGE (5). Studies show low levels of physical activity in this population when compared with individuals without ID (6), low technical knowledge of professionals and parents about the performance and benefits of physical activity and thus there is little adherence to physical activity and, furthermore, high rates of sedentary lifestyle and associated diseases (6,7,8).

The study of lifestyle becomes paramount, since it relates to health and social indicators to improve the quality of life for gains in physical fitness (9). The school, in this scenario, it is a privileged environment for intervention programs where it plays an important and strategic role to prevent increasing the level of physical inactivity of the school population and where there are activities to promote social inclusion of family and community (10). With the prospect of changing this situation, it is necessary to develop means and methods that enable educational intervention activities with clear and practical results. Different interventions, based only on physical activity, have been performed (11), yet in spite of positive results on issues of body composition it is known that, on the other hand, the adoption of active behaviors, including therein the issue of inclusion, is more complex because not address the determinants of physical activity.

Through these and other data, was launched in 2008 the project "Always Believe". Classified as a macro-projects, which became part of the political teaching of the Center for Special Education number 1 Ceilândia-DF, working on binomial education health, this project aims to evaluate and compare the clinical and teaching a physical activity program and lifestyle variables in adaptive behavior, knowledge, body composition and physical fitness and health. As the object of study in a population with intellectual disabilities, their families, professional education community. The data collection activities were lectures, case studies, recreation and leisure, competitions, festivals, tours and other associated projects were implemented and evaluated during the years 2008 and 2009. These activities were designed to ascertain whether promoting physical activity in its different manifestations, we could raise the level of knowledge of people about the reality of the person with ID and thus elevate the practice / level of physical activity.

METHODS AND POPULATION

The study was voluntary and non-invasive held during the events of the educational institution, after the accepted term of informed consent for participants.

The group estimated in 2008 was reassessed in 2009 The non-participation in any of the steps of measuring data was a criterion for exclusion from the study.

The study population was initially, n = 400, and the loss of the 94 subjects who completed the study population was (n = 306) divided into:

* Teachers and Education Professionals: 30 (-14);
* Students: 79 (-21);
* Parents or guardians: 101 (-17);
* Community 96 (-42).

This study is characterized as longitudinal and were evaluated at two different times. The first in 2008 (one semester) in some school events and the second time in the 2009 academic year (two semester) during the same events that were repeated. (The events were: Commemorative Dates (Carnival, Jerk, children's day and etc..) Street Leisure (Saturdays) and other activities where data were taken with the following instruments: a) adaptive behavior (questionnaire given to the teacher about his student), b) knowledge (yes or no questions on disability), c) body composition (tape measure, meter and a precision balance), d) physical fitness and health, and) the level of habitual physical activity (13) f) lifestyle (12). Questionnaires ("a" and "b") do not have validation.

In this descriptive study was calculated and the average standard deviation of adaptive behavior, knowledge, body composition, physical fitness, physical activity level and lifestyle (variable indirect) in each population group mentioned above (direct variable).

To verify the improvement or not the variables we collected based on the initial survey done during the 2008 school year, and no data in the tables of recommended assessment, since the group was quite heterogeneous, was used in addition to basic statistical analysis variance (ANOVA) was used for comparison between groups on items of fitness and lifestyle, and the difference between the groups means the technique of Scheffé. We calculate the values of "p" between groups and between groups by assessing pre and post test. In all tests were adopted significance level less than or equal to 5% ($p<0.05$)

RESULTS

Table1: Data on age, gender in different types of education.

	RESULTS N=306(%)	Students (%) N=79	Profs.(%) N=30	Parents(%) N=101	Community(%) N=96
Age (years)	-	18(6-35)	35,4;(25-52)	38,8(18-75)	37,2(28-65)
Gender					
Male	105(34.3)	37(46.8)	9(30)	35(34.6)	24(25)
Female	201(65.6)	42(53.1)	21(70)	66(65.3)	72(75)

Table 2: Data of Knowledge

Population/Knowledge about def.	Profs.(%)		Parents(%)		Community(%)		p
	After yes No	Before yes No	After Sim No	Before Sim No	After yes No	Before yes No	
What is DI.	62,4 37,6	75,2 34,8	25,2 74,8	40,2 59,8	22,5 77,5	39,1 60,9	.05
What's your basic limitation.	82,2 17,8	83 17	71,5 28,5	74,2 25,8	----------		.07
Do you know how to evaluate improvements.	61,3 38,7	72,1 27,9	57,3 42,7	60,4 39,6	----------		.06

Table 3: Data of physical fitness (students).

Physical Fitness / Age	6 a 10 n=13 Mean(SD)	11 a 15 n=16 Mean(SD)	15 above n=13 Mean(SD)	p
BMI	21,1(1.4)** 23,3	22,9(2.1) 23,7	27,1(2.8)** 27,3	0,05* .62
WHR	0,6(0,1) 0,6	0,7(0,06) 0,71	0,9(0,1) 0,87	0,08 .75
Abdominal	15(5)** 16	18(5) 23	14(4)** 18	0,05* .06
Resist. Aeróbics	---------	1200(230) 1186	980(130) 1101	0,04* .06

Data of physical fitness (Table 3) showed no improvement of students before and after (.06/.58) but there was a significant difference between ages in the abdominal and aerobic endurance (.05 and .04) and a slight improvement in group 15> but not meaningful.

Table 4: Details of the levels of physical activity per session MET / min / week.

NAF(section number)/Teaching	Students n=79 Mean (SD)	Prof. n=30 Mean (SD)	Parents n=101 Mean (SD)	P
1º- Physical activity at work (school).	275(7,9) 285	357(4,5) 368	272.5(4,7) 301	<0,05 .08
2º- Physical Activity as a means of transport.	100(18,4) 120	215.2(11,5) 213	253(12,9) 259	<0,05 .08
Total	1244.2 1583	2215.3 2332	2447.8 2558	<0,05 .05

Figures on the energy expenditure (Table 4) revealed significant differences between groups, but in comparison between pre and post test of each group, no statistically valid result appeared. But in total, which is the sum of all activities, we observed significant results (.05) between both groups and in each group. During the study noted, which can be described as a bias in the study, the low school attendance and we try to exclude physical activity at school, as some others did not.

The classification of levels of habitual physical activity (Table 5) followed the trend of the study. Significant differences between groups, but not much improvement after the second collection. Although the levels of total physical activity had increased in both groups (Table 4) seem to have failed to reduce the number of insufficiently active in pre and post evaluation (.58 average of the three groups)

In Table 6 we see a lifestyle that are negative for the three groups mainly on physical activity and food intake (.07 and .05)

Table 5: Classification of the level of physical activitie.

Level of physical activitie/ groups	Students n=79 %	Prof. n=30 %	Parents n=101 %	p
Very active	18(5.8) 16	34**(6.4) 36	50**(5.8) 50	<0,05 .39
Active	48(4.8) 50	49**(3.7) 50	32**(12.3) 31	<0,05 .52
Insuficiently active	34(2.1) 34	17**(7.8) 18	18**(8.2) 19	<0,05 .58

In the section on preventive behavior, which is defined as "set of conceptual skills, social and practical skills acquired by the person to function in daily life" (2). Given that there is a questionnaire in the validation phase in the U.S. asked questions about their areas of adaptive behavior, namely: conceptual skills (the teacher noted improvement in language, writing, concepts related to money and autonomy), social skills (observing rules, interpersonal skills, responsibility); Practical skills (displacement , hygiene and clothing). We observed that there were reports of improvement in all components asked (73%), when we asked for the teacher to compare with the beginning of the project.

DISCUSSION

The regular programs of physical activity for people with intellectual disabilities are being studied more carefully in recent years. However, different studies, which showed that this population does not reach minimum levels of physical activity and, moreover, also has negative components in your lifestyle (16,17,18).

Neurological reasons may explain the difficulty of this population in some aspects of physical fitness when compared with people without disabilities, but it is worth noting that there are few studies that follow this population and high levels of physical inactivity is an opportunity for the emergence of chronic non-communicable diseases (13 , 15.16).

This study, despite being an experience, it was demonstrated in all parameters. Even some tools for collecting data is not being validated can be observed a strong trend toward a sedentary lifestyle and lack of information for all pass.

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EFFECTS OF A "MACRO PROJECT" FOR INTERVENTION IN TEACHING AND CLINICAL PARAMETERS OF SPECIAL COMMUNITY.

ABSTRACT:

At least 60% of world population can not complete the recommended amount of physical activity programs and only show common and with limited results. Objective: To evaluate and compare the clinical and teaching a program of physical activity and lifestyle variables in adaptive behavior, knowledge, body composition and physical fitness and health and levels of physical activity in people with intellectual disabilities, their families community and coming from a school of Special Education, Ceilandia-DF, and its surroundings. Methods: The sample consisted of 400 persons of both sexes aged 6 e75 years divided into four groups (students, managers, education professionals and community). This is a longitudinal study on the effect of a program to promote physical activity and social inclusion, conducted over two years, assessed by questionnaire, physical tests and tests of body composition. Results: There was a 20% improvement in overall knowledge about disabilities, differences between ages in the abdominal and aerobic endurance (.05 and .04) and a slight improvement in the group 15> but not significant Conclusion: Both groups had significant variance, demonstrating low levels of physical activity, negative life style among them but not most of the data pre and post test were not significant which means that more studies and school-based interventions should be conducted.

KEYWORDS: Lifestyle, Physical Fitness, Social Inclusion.

EFFETS D'UN "PROJET DE MACROS" D'INTERVENTION DANS L'ENSEIGNEMENT ET DE PARAMÈTRES CLINIQUES COMMUNAUTAIRES SPÉCIAUX.

RÉSUMÉ:

Au moins 60% de la population mondiale ne peut pas terminer la quantité recommandée de programmes d'activité physique et ne montrent commun et avec des résultats limités. Objectif: évaluer et de comparer l'efficacité clinique et l'enseignement d'un programme d'activité physique et les variables de style de vie dans le comportement adaptatif, les connaissances, la composition corporelle et de condition physique et la santé et les niveaux d'activité physique chez les personnes ayant une déficience intellectuelle, leurs familles communauté et à venir d'une école de l'éducation spéciale, Ceilandia-DF, et ses environs. Méthodes: L'échantillon se composait de 400 personnes des deux sexes âgés de 6 e75 ans, divisée en quatre groupes (étudiants, gestionnaires, professionnels de l'éducation et de la communauté). Il s'agit d'une étude longitudinale sur l'effet d'un programme visant à promouvoir l'activité physique et l'inclusion sociale, menée sur deux ans, évaluée par un questionnaire, des tests physiques et des tests de composition corporelle. Résultats: Il ya eu une amélioration de 20% de connaissances générales sur les handicaps, les différences entre les âges de l'endurance aérobie et abdominale (.05 et .04) et une légère amélioration dans le groupe 15> mais non significative Conclusion: Les deux groupes avaient écart significatif, démontrant faibles niveaux d'activité physique, le style de vie négatifs entre eux mais pas la plupart des données pré-et post-test ne sont pas significatifs ce qui signifie que plus d'études et interventions en milieu scolaire doit être menée.

MOTS-CLÉS: Style de vie, de remise en forme physique, l'inclusion sociale.

EFECTOS DE UN "PROYECTO MACRO" PARA LA INTERVENCIÓN EN LA ENSEÑANZA Y LOS PARÁMETROS CLÍNICOS DE LA COMUNIDAD ESPECIAL.

RESUMEN:

Al menos el 60% de la población mundial no puede completar la cantidad recomendada y programas de actividad física sólo muestran común y con resultados limitados. Objetivo: Evaluar y comparar las características clínicas y la enseñanza de un programa de actividad física y las variables de estilo de vida en la conducta adaptativa, el conocimiento, la composición corporal y la condición física y la salud y los niveles de actividad física en las personas con discapacidad intelectual, sus familias comunidad y procedentes de una escuela de Educación Especial, Ceilandia-DF, y sus alrededores. Métodos: La muestra estuvo constituida por 400 personas de ambos sexos de entre 6 e75 años, divididos en cuatro grupos (estudiantes, administradores, profesionales de la educación y la comunidad). Se trata de un estudio longitudinal sobre el efecto de un programa para promover la actividad física y la inclusión social, llevado a cabo durante dos años, evaluó mediante un cuestionario, examen físico y pruebas de composición corporal. Resultados: Se observó una mejora del 20% en el conocimiento general acerca de las discapacidades, las diferencias entre las edades de la resistencia abdominal y aeróbicos (.05 y .04) y una ligera mejoría en el grupo de 15>, pero no significativa Conclusión: Ambos grupos tenían una variación significativa, lo que demuestra bajos niveles de actividad física, estilo de vida negativo entre ellos, pero no la mayoría de los datos pre y post test no fueron significativas lo que significa que más estudios e intervenciones en las escuelas debe llevarse a cabo.

PALABRAS CLAVE: Estilos de vida, estado físico, la inclusión social.

EFEITOS DE UM “MACRO PROJETO” DE INTERVENÇÃO EM PARÃMETROS CLÍNICOS E PEDAGÓGICOS DE COMUNIDADE ESPECIAL.

RESUMO:

Pelo menos 60% da população do mundo não conseguem completar a quantidade recomendada e programas de atividade física apenas se mostram comuns e com resultados limitados. Objetivo: Avaliar e comparar os efeitos clínicos e pedagógicos de um programa de atividade física e estilo de vida em variáveis de comportamento adaptativo, conhecimento, composição corporal e aptidão física relacionada à saúde e níveis de atividade física habitual em população com deficiência intelectual, seus familiares e comunidade oriunda de uma escola de Ensino Especial, de Ceilândia-DF, e suas redondezas. Métodos: A amostra foi composta por 400 pessoas de ambos os gêneros com idades entre 6 e75 anos divididos em 4 grupos (alunos, responsáveis, profissionais da educação e comunidade). Trata-se de um estudo longitudinal sobre o efeito de um programa de promoção de atividade física e inclusão social, realizados ao longo de dois anos, avaliados por meio de questionários, testes físicos e testes de composição corporal. Resultados: Houve melhoras de 20% no conhecimento geral sobre deficiência, diferença significativa entre as idades no abdominal e resistência aeróbica (.05 e .04) e uma ligeira melhora no grupo 15> porém não significativa Conclusão: Os grupos tiveram variância significativa, demonstrando baixos níveis de atividade física, estilo de vida negativo entre eles porém a maioria dos dados não pré e pós teste não foram significantes o que significa que mais estudos e intervenções com base na escola devam ser realizados.

PALAVRAS-CHAVE: Estilo de vida, Aptidão Física, Inclusão social.