



Revista Brasileira em Promoção da Saúde

ISSN: 1806-1222

rbps@unifor.br

Universidade de Fortaleza

Brasil

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Revista Brasileira em Promoção da Saúde, vol. 26, núm. 1, enero-marzo, 2013, pp. 9-17
Universidade de Fortaleza
Fortaleza-Ceará, Brasil

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IMPACT OF URBAN CHILD LABOR IN THE HEALTH OF CHILDREN AND ADOLESCENTS

Repercussão do trabalho infantil urbano na saúde de crianças e adolescentes

Repercusión del trabajo infantil urbano en la salud de niños y adolescentes

Original Article

ABSTRACT

Objective: To analyze the health of children and adolescents who are under working conditions. **Methods:** The study considered 32 children and adolescents, aged between 6 and 14, enrolled on the Programa de Erradicação do Trabalho Infantil - PETI, Brazil (Child Labor Eradication Program) from three different regions of the city of São Paulo. The participants were individually assessed through an occupational anamnesis, systematized by an evaluation form to collect data on labor activity and Lipp & Lucarelli's Child Stress Scale was applied. Data statistical analysis was performed with softwares EVOC 2000 and SPSS. **Results:** It was found that recycling was the predominant occupation, totalizing 59.3% of the sample, and the collective method was more prevalent in relation to the individual one. Over 90% of participants used protective equipment in working activity and 72% do not miss the occupation they once had. Of the participants presenting significant signs of stress, 75% work or used to work with recycling activities and 87.5% are still engaged on the activity. When analyzing the Child Stress Scale, it was noted that there are more stress signs in child workers (46.7%) in comparison to the former workers (5.9%) and significant difference between work and stress (p -value 0.008). **Conclusions:** It was noted that the labor activity in childhood may cause perturbation of psychophysiological nature and, in spite of the relatively small sample size, deleterious aspects of this activity for children and adolescents were pointed out. It was also evidenced that, despite a high percentage of this group becomes enrolled on the program, they still keep their occupation.

Descriptors: Child Labor; Occupational Health; Public Policies.

RESUMO

Objetivo: Analisar a saúde de crianças e adolescentes em situação de trabalho infantil urbano. **Métodos:** Participaram do estudo 32 crianças e adolescentes de 6 a 14 anos de idade inscritos no Programa de Erradicação do Trabalho Infantil (PETI) de três diferentes regiões da cidade de São Paulo. Os participantes foram avaliados individualmente, através de uma anamnese ocupacional, sistematizada por ficha de avaliação, para coleta de dados referentes à atividade laboral e foi aplicada a Escala de Estresse Infantil (EEI). A análise estatística dos dados foi realizada com os softwares EVOC 2000 e SPSS. **Resultados:** Verificou-se que a reciclagem foi a ocupação predominante, totalizando 59,38% (19) da amostra, e o método coletivo teve predominância em relação ao individual. Mais de 90% (29) dos participantes utilizavam equipamentos de proteção na atividade laboral e 71,88% (23) deles não sentem falta da ocupação exercida. Entre os participantes que apresentaram sinais significativos de estresse, a maioria trabalha ou trabalhava com reciclagem e ainda exerce a atividade laboral. Quando analisada a Escala de Estresse Infantil, observou-se que há mais sinais de estresse em trabalhadores infantis quando comparados aos ex-trabalhadores e existe correlação significativa entre trabalho e estresse ($p=0,008$). **Conclusões:** Observou-se que a atividade laboral na infância pode causar transtornos de natureza psicofisiológica e, apesar de a amostra ter sido pequena, foram apontadas questões deletérias dessa atividade para crianças e adolescentes. Foi evidenciado ainda que, embora um grande percentual seja incluído no programa, eles permanecem exercendo a atividade laboral.

Descritores: Trabalho de Menores; Saúde do Trabalhador; Políticas Públicas.

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Received on: 04/20/2012

Revised on: 06/22/2012

Accepted on: 07/12/2012

RESUMEN

Objetivos: Analizar la salud de los niños y adolescentes en situaciones de trabajo infantil urbano. **Métodos:** En este estudio participaron 32 niños y adolescentes de 6 a 14 años de edad, inscritos en el Programa de Erradicación del Trabajo Infantil (PETI) de tres regiones diferentes de la ciudad de São Paulo. Los participantes fueron evaluados de forma individual, a través de una anamnesis ocupacional, sistematizada por una ficha de evaluación, para recopilar los datos referentes a la actividad laboral y fue aplicada la Escala de Estrés Infantil (EEI). El análisis estadístico de los datos fue realizado con los softwares EVOc 2000 y el SPSS. **Resultados:** Se pudo verificar que el reciclaje fue la ocupación predominante con un total de 59,38% (19) de la muestra, y el método colectivo prevaleció frente al individual. Más del 90% (29) de los participantes utilizaron equipamientos de protección en la actividad laboral y un 71,88% (23) de ellos no echan de menos el trabajo realizado. Entre los participantes que presentaron algún signo significativo de estrés, la mayor parte trabaja o trabajaba con reciclaje. Una vez analizada la Escala de Estrés Infantil, se observó que hay más signos de estrés en los niños que trabajan en comparación con los antiguos trabajadores y existe una correlación significativa entre el trabajo y el estrés ($p=0,008$). **Conclusiones:** Se observó que la actividad laboral en la infancia puede causar trastornos de naturaleza psicofisiológica y, a pesar de que la muestra fue pequeña, se pudieron identificar daños de esta actividad en los niños y adolescentes. Aunque un gran porcentaje haya sido incluido en el programa, se evidenció que ellos siguen ejerciendo la actividad laboral.

Descriptores: Trabajo de menores; Salud laboral; Políticas Públicas.

INTRODUCTION

Child and adolescent labor is present in several countries around the world, presenting peculiar configurations in countries of peripheral economics⁽¹⁾. According to data from the *Pesquisa Nacional de Amostra por Domicílio - PNAD* (National Household Sample Survey), 3.4 million children and adolescents aged 10 to 17 are working in Brazil⁽²⁾.

Currently, Brazilian laws allow for the early entry of adolescents aged 16 to 18 into the labor market and protects them by guaranteeing labor rights and social security. The law also permits those aged between 14 and 16 to enter the labor force as an apprentice only, enrolled in a technical and professional training program conducted according to the guidelines and current legislation basis^(3,4). The work activities performed by children and teenagers under 14 are prohibited by the Constitutional Amendment number 20, of December 15, 1998⁽⁴⁾.

The Estatuto da Criança e do Adolescente - ECA (Child and Adolescent Statute) prohibits work during nighttime for children and adolescents; activities that are considered dangerous, unhealthy and painful; performed in an

environment that is harmful to their education and physical, mental, moral and social wellbeing; and have unsuitable schedules for school attendance. This is governed by a Federal Law (number 8.069), approved on July 13, 1990, which stands for a policy of comprehensive care for children and adolescents, considering them as citizens under special conditions of development⁽³⁾.

Nevertheless, child labor continues at worrying levels and, unfortunately, the extent and nature of its impact on health, education and development of children have been studied relatively little^(5,6). It is known that children in these conditions have high dropout rates and poor school performance, but since the damage regarding occupational diseases in adolescents appear mostly only in adulthood, the statistics remain masked, making it difficult to develop policies that regulate the entry of adolescents into the labor market^(7,8).

By being introduced to the labor market so early, these young people perform a wide range of activities, making up a 'cheap and unqualified labor', either in the primary sector of the economy, cutting sugar cane, sisal, mining coal, harvesting crops etc.; in the secondary sector as manufacturing apprentices in general, in the tertiary sector, as babysitters, junior guards, maids, ushers etc.; and working in the informal economy as street peddlers, sweets sellers, in the streets, in domestic activities and even in illegal activities, such as drugs trafficking and prostitution⁽⁹⁾.

Child labor is a chronic social problem that afflicts a large portion of mankind, and although longstanding, this phenomenon is not yet fully understood, but it's known to be associated with, though not restricted to, poverty, inequality and social exclusion. There are other equally important factors, such as cultural ones, which are related to traditional forms of family and economic organization^(1,10), in addition to 'market' interests, since this activity involves reduced spending and generates significant profits⁽⁹⁾.

Considerable progress in the production and measurement of child labor has been seen in the country over the last decade and a half. In 1992, the *Pesquisa Nacional por Amostra de Domicílios*, performed by the *Instituto Brasileiro de Geografia e Estatística - PNAD/IBGE* (Brazilian Institute of Geography and Statistics) began to investigate the participation of children aged 5 to 9 in the labor market⁽¹¹⁾. In 2001, a special supplement was comprised in PNAD to assess, among other issues, the incidence hard labor⁽¹²⁾. In 2006, PNAD received a supplement addressing the evaluation of child labor impact on health. Today, Brazil is internationally recognized for its excellence in collecting and providing information on child labor^(11,13).

Among the damages caused by the early insertion of an adolescent into the labor market, occupational accidents

stand out, being considered by many scholars as a form of violence against workers, especially the young, because they can cause permanent or temporary disabilities, and even death. These disabilities represent a major cause of morbidity and mortality among individuals in this age group. The notification of these disabilities is compulsory, as stated by the Ordinance number 777 of 2004. This ordinance seeks to integrate the services network of the *Sistema Único de Saúde - SUS* (Brazilian Unified Public Health System), which are focused on the worker assistance and the labor environments monitoring, demonstrating that work-related accidents among young people deserve special attention from public policy in the country^(9,14).

Programa de Erradicação do Trabalho Infantil - PETI (Child Labor Eradication Program) is a Brazilian program that provides income transference directly from the Federal government to families of children and adolescents aged 4 to 15 years and 11 months who are involved in child work, except those above 14, who work as apprentices. Therefore, PETI grants an allowance to replace the income children used to bring home. Families must, however, enroll their children in school and get them to attend the extended school day or activities in socio-educational centers outside the school period⁽¹³⁾.

Apprentice work is regulated by Law 10.097/2000, which states that the employer shall be committed to provide methodical technical and professional training, consistent with the physical, moral and psychological development, enabling the professionalization to be part of an educational process⁽¹³⁾.

PETI comprises the *Sistema Único de Assistência Social - SUAS* (Unified System for Social Assistance) and has three basic axes: direct income transfer to families with children or adolescents at work, services for coexistence and the strengthening of bonds for children/adolescents up to 16 years of age and monitoring of families through the Centro de Referência de Assistência Social - CRAS (Social Assistance Reference Center) and the Centro de Referência Especializado de Assistência Social - CREAS (Social Assistance Specialized Reference Centers), state government units that offer specialized and continuing services to families and individuals in threatening situations or under violence to their rights.

The states, through their social assistance management agencies, map out child labor cases occurring in their municipalities, which are presented to the Comissões Estaduais de Erradicação do Trabalho Infantil (State Commissions for the Eradication of Child Labor) for validation and the establishment of inclusion criteria for the program. Implemented in Brazil in 2000, this is considered one of the main programs of the social protection network⁽¹³⁾.

The city of São Paulo is divided into 31 sub-municipalities, an official and regulated administrative and territorial division. Each of them has its own Social Assistance Management Agency⁽¹⁵⁾ that requests the inclusion and monitors the children and adolescents in the PETI.

The numbers of official records or studies that attempt to quantify the work done by children and adolescents tend to underestimate the real situation, which is probably much more alarming, since one should not forget that there is a large contingent of invisible, unrecognized labor that is difficult to measure, such as the sexual exploitation of children, drugs trafficking, domestic work, aid to families in small industries and street workers, such as people delivering flyers, product sellers, guards, car washers, beggars, shoe-shiners, among others⁽⁶⁾.

According to Convention 182 of the International Labor Organization⁽¹⁶⁾, which prohibits the worst forms of child labor (art. 3 D), 'work that by its nature or due to the circumstances in which it is implemented is likely to harm the health, safety or morals of children, is considered to be one of the worst forms of child labor'. According to the same convention, only the illegal, punishable activities are listed among the worst types of urban labor, omitting the street workers mentioned above.

The data shows that children under 14 should not perform any work activity, because of the potential risks to their bio-psychosocial development that the physical and emotional burdens of social work entail⁽⁸⁾. In Brazil, however, most actions that fight child labor focus primarily on financial support to the victims' families to offset the income earned by them⁽¹⁷⁾.

The evidence indicates that the younger the child is, the greater the interference in school activities, recreation and leisure, longer are the working hours including night work, and greater is the exposure to occupational risks^(6,18).

Child labor provides earnings as a source of family income; in return, these workers spend their childhood and teenage years away from school, without access to healthcare and basic rights, turning them into adults without major prospects, citizens doomed to wander through various subordinate activities and/or life on the streets⁽⁴⁾.

'The factors of greater or lesser vulnerability to stress in childhood are directly influenced by the various forms of social support that children receive'⁽¹⁹⁾, and 'the greater the number of changes that a child has to face in a period of twelve months, the greater the likelihood of wear of the organism as a result of the depletion of its adaptive energy'⁽¹⁹⁾. Therefore, it is relevant to compare what kind of change could occur among child laborers in different moments of life by the end of their working period?

Based on clinical observations, the symptoms of childhood stress, just as in adults, may be psychological, physical, or both, and may have serious consequences if they are excessive⁽²⁰⁾.

Hence, the present study addresses the health of children and adolescents in urban working conditions. It intends to evaluate these urban workers, verifying the physical and psychological damages that are triggered, comparing the manifestations that occur among children and adolescents who perform the same occupational functions, in addition to analyzing the kind of changes that are seen among child workers in activity and those who have not been working for twelve months, observing what changes they underwent after being enrolled in PETI.

METHODS

This research is a descriptive study of children and adolescents aged 6 to 14, enrolled in the Child Labor Eradication Program (PETI, Brazil) of the *Coordenadorias de Assistência e Desenvolvimento Social* (Coordinating Agencies for Assistance and Social Development) of three different Sub-Municipalities in São Paulo, in the period from March to October 2008. From a total of 47 enrolled children, 08 left the program, 03 refused to participate and 04 reported not having performed labor activities, totaling 32 participants for the study.

Child labor was considered to be any regular work activity, paid or unpaid, at home or not, and specifically, informal activities.

Once they were included in the program, their families were sent the Informed Consent Form for the inclusion of the children and/or adolescents in the study, since we're talking about a population under the age of 18 years.

Those who were aged 12 or older were classified as adolescents, and those under this cutoff age, as children, according to ECA (the Brazilian Statute for the Child and Adolescent)⁽³⁾.

Children or adolescents with special needs, or those who lost close relatives or relations within 1 year preceding the assessment, were excluded from the study aiming to avoid interferences with the Childhood Stress Scale (CSS)⁽¹⁹⁾.

After obtaining the consent to participate in the study, the participants were individually assessed, as well as their work environments, through a systematic evaluation form for the collection of data on personal life, occupation and main complaints, so that the findings of the evaluation could be related to their occupations and the life period in which they were performed.

Were considered as workers those who were then performing work activity or who were newly enrolled in the

PETI and, as former workers, those who had no longer been working for 12 months or more.

The CSS was used for the assessment of childhood stress and the most frequent types of reactions: physical, psychological, psychological with a depressive component and psycho-physiological. This is a validated scale that contains 35 items on a Likert-type scale with five points and factorial analysis revealed the four factors described above and a general factor: stress. It has good indicators of internal consistency (Cronbach's alpha 0.90)⁽¹⁹⁾

Although devices for personal protection in work activities are not part of the regulatory standard in current legislation⁽²¹⁾, Personal Protective Equipment (PPE) was considered to be any device or product, of individual use by the worker, for the protection against risks that threatens his safety and/or health.

Data analysis was performed with SPSS V16 and Excel Office 2007, through descriptive statistics that were presented in graphs and tables. To compare three or more means, analysis of variance to one factor was used (ANOVA); the Chi-square test was used to test the significance of the association between variables, adopting the 5% level for statistical significance.

The study was submitted to the regulatory procedures of the *Comitê de Ética do Instituto de Assistência Médica ao Servidor Público Estadual* (Ethics Committee of the Institute for Medical Assistance to State Public Servants), being approved and registered under number 126/06.

RESULTS

Among the participants, 13 (40.6%) were children and 19 (59.4%) adolescents, 18 (56.2%) male and 14 (43.8%) female, with sample homogeneity.

Among the occupational activities found, recycling workers predominated with a statistically significant difference when compared with other performed professions. There was a predominance of the collective working method, in relation to the individual method or to the combination of both. As collective work were listed the activities performed along with their parents or guardians, groups of colleagues from their region of residence, or family groups, such as brothers and cousins, without the presence of an adult.

It was observed that 29 participants (90.60%) of the sample used to wear personal protective equipment (PPE) for the job and 10 participants (32.3%) reported work accidents. Among the PPE described, aprons, gloves, sunscreen, and hats to protect against solar radiation stand out.

Table I - Sample description. São Paulo-SP, 2008.

Variable	Category	N	%	p-value
Age group	Child	13	40.60	0.134
	Adolescent	19	59.40	
Sex	M	18	56.25	0.317
	F	14	43.75	
Worker		15	46.88	0.167
Ex-worker		17	53.12	
Professional Activity	Recycling*	19	59.38	<0.001
	Peddlers	05	15.62	
	Domestic activity**	04	12.50	
	Marketeers	04	12.50	
Working Method	Individual	05	15.62	<0.001
	Collective	25	78.13	
	Individual / Collective	02	6.25	
PPE use***	Yes	29	90.60	<0.001
	Not	03	9.40	
Work Accident	Yes	10	31.30	0.003
	Not	22	68.80	
Enjoys working	Yes	19	59.38	0.080
	Not	13	40.62	
Misses	Yes	09	28.12	<0.001
	Not	23	71.88	

* Recyclable material collectors in the streets or landfills

** Babysitters and parts assemblers in family group

*** Personal Protective Equipment

Table II - Comparison between accident at work and Childhood Stress Scale. São Paulo-SP, 2008

Accidents		Mean	Median	Standard deviation	VC*	Min	Max	n	CI*	p-value
Childhood stress index	Not	35.2	33	17.8	0.5	11	72	22	7.4	0.118
	Yes	46.8	48.5	21.2	0.5	18	84	10	13.1	
Physical	Not	6.9	6	4.8	0.7	0	20	22	2.0	0.029
	Yes	11.1	11	5.0	0.5	3	20	10	3.1	
Psychological	Not	12.3	12	6.9	0.6	4	26	22	2.9	0.529
	Yes	14.0	12	7.7	0.5	5	30	10	4.8	
Psychological and Depressive Behavior	Not	7.4	6.5	5.4	0.7	0	20	22	2.3	0.713
	Yes	8.2	7	5.9	0.7	2	18	10	3.7	
Psychophysiological	Not	9.2	10	5.1	0.6	0	18	22	2.1	0.044
	Yes	13.5	15	5.7	0.4	4	22	10	3.6	

* VC: Variance Coefficient.

CI: Confidence interval.

Table III - Comparison between painful complaint and Childhood Stress Scale. São Paulo-SP, 2008.

Painful complaint		Mean	Median	Standard deviation	VC*	Min	Max	n	CI*	p-value
Childhood stress index	Not	33.2	31.5	15.9	0.5	11	62	20	7.0	0.029
	Yes	48.3	52.5	21.5	0.4	14	84	12	12.1	
Physical	Not	6.3	6	3.9	0.6	0	13	20	1.7	0.004
	Yes	11.4	10.5	5.5	0.5	3	20	12	3.1	
Psychological	Not	10.9	11	5.7	0.5	4	21	20	2.5	0.046
	Yes	16.0	15.5	8.2	0.5	5	30	12	4.6	
Psychological and Depressive Behavior	Not	7.3	6	5.7	0.8	0	20	20	2.5	0.599
	Yes	8.3	7	5.4	0.6	1	18	12	3.1	
Psychophysiological	Not	9.4	10	5.3	0.6	0	19	20	2.3	0.116
	Yes	12.6	14.5	5.8	0.5	4	22	12	3.3	

* VC: Variance Coefficient.

CI: Confidence interval.

Table IV - Comparison between worker and Childhood Stress Scale. São Paulo-SP, 2008.

Worker		Mean	Median	Standard deviation	VC*	Min	Max	n	CI*	p-value
Childhood stress index	Not	35.9	33	17.6	0.5	14	62	18	8.1	0.188
	Yes	45.1	45	20.1	0.4	14	84	13	10.9	
Physical	Not	7.4	7	4.1	0.5	2	15	18	1.9	0.171
	Yes	9.9	10	6.0	0.6	1	20	13	3.3	
Psychological	Not	12.9	12.5	6.8	0.5	4	24	18	3.1	0.873
	Yes	13.3	12	7.6	0.6	5	30	13	4.1	
Psychological and Depressive Behavior	Not	7.3	6.5	4.7	0.7	0	17	18	2.2	0.514
	Yes	8.6	8	6.6	0.8	1	20	13	3.6	
Psychophysiological	Not	8.9	9.5	5.0	0.6	0	17	18	2.3	0.024
	Yes	13.4	14	5.5	0.4	4	22	13	3.0	

* VC: Variance Coefficient.

CI: Confidence interval.



Figure 1. Comparison between workers and former workers with significant signs of stress. São Paulo-SP, 2008.

Although 13 participants (71.88%) mentioned not missing their occupational activity ($p < 0.001\%$), 19 of them said to enjoy working (59.38%) (Table I).

When relating the participants who reported work accidents to those with significant levels of stress, no statistically significant association was found, neither it was for those who reported not liking the professional activity, so these factors are both considered as statistically independent.

A statistically significant difference was observed when workers and former workers were compared in relation to the development of significant signs of childhood stress (p -value 0.008), as it can be seen in Figure 1.

For individuals who report a work accident, there is statistically significant difference with those who have not had an accident, in their physical and psycho-physiological reactions scores (Table II).

Among those complaining about pains, scores were higher in all segments, with a statistically significant difference in the total score, regarding physical reactions and psychological reactions (Table III).

It was also observed that among the workers there is a statistically significant higher score on psycho-physiological responses when compared to those who do not perform labor activity anymore (Table IV).

DISCUSSION

Although the insertion of the population aged 5 to 13 in economic activity is prohibited by law in the country and it is in slow decline, child labor rates are still alarmingly high, as has been pointed out by IBGE in the last 5 years.

PNAD 2006 (National Household Survey) showed that labor among children and adolescents aged 5 to 17 is associated with less favorable schooling indicators and low incomes in the households they live in.

The PETI assists more than 820,000 children who have been removed from work in more than 3,500 cities. The program recognizes children and adolescents as citizens, protecting them from forms of labor exploitation and contributing to their overall development. Therefore, it seeks to provide access to formal schooling, health care, food, sports, leisure, culture and professional development, as well as to family and community life⁽¹³⁾.

Although the PETI works hard to eradicate child labor, 46.88% of the participants were still involved in labor activities, despite being included in the program.

It is worth discussing whether the program is consisting in the payment of allowances, leading to a low overall impact and not actually achieving change in the families' life conditions⁽⁵⁾.

A study of adolescent labor in rural areas showed that the frequency of injuries reported by the adolescents working was dramatic: nearly half of them suffered some kind of accident at work. These lesions were often related to the demands of chores that are not appropriate for adolescents⁽²²⁾.

This study presents a much higher rate of work accidents than the national one, with 31.3% of participants reporting work accidents. While the mean difference was not statistically significant, this represents a very high rate when compared to the national contingent.

It was also observed in this research that, although 59.38% of the participants reported liking the work activity they perform, 71.88% of them did not miss the activity; a divergent index related by the participants.

In 2005, in a study on workplace accidents with teenagers, the results demonstrated that not only the physical aspects of work should be measured to determine potential risks to adolescent health, but also the psychological aspects. Psychological factors related to the work environment have been studied in adults with notable results concerning the work demands and their relationship to physical illnesses and psychological symptoms^(5,23).

Although this study does not indicate that the childhood stress index was significant among all participants, since only 8 participants showed significant signs of stress according to the Childhood Stress Scale by Lucarelli & Lipp⁽¹⁹⁾, we do observe that there is a significant rate (0.008%) when only participants with significant signs of stress are analyzed, who are mostly the workers, indicating that their removal from labor activity is beneficial to this population.

Work reduces the time the child has available for leisure, family life, and education. It also decreases the opportunity to establish relationships and interact with their peers and others in the community in general. Furthermore, the younger children experience a conflicting role in the family, workplace and community, since, being workers, they are forced to act like adults but, on the other hand, they cannot escape their natural condition as child. These factors are a source of emotional stress affecting the mental and physical development in a critical stage of life^(23,24).

Children and adolescents live through a dynamic and complex process of differentiation and maturation. They need time, space and favorable conditions to make their transition in the several steps towards adulthood. These changes make them more vulnerable to risky situations in the workplace and more likely to acquire work-related illnesses^(8,24).

Another issue is that work-related diseases in children and adolescents tend to manifest themselves only later in life and are therefore difficult to characterize with the work previously done⁽⁶⁾.

The monitoring by the PETI needs to be better established so that children and adolescents are removed more efficiently from labor activities, since the predominance of significant signs of stress was observed only in those who still exert this activity.

CONCLUSION

Although the sample size was small, the findings show alarming rates when compared to national indices.

Urban child labor can trigger disorders in psychophysiological areas and deleterious aspects of this activity for children and adolescents were pointed out.

Further studies, expanding the population, might or not confirm the findings described here, but the numbers of children and adolescents in child labor and exposed to physical, emotional and social work loads makes this issue a priority for public policy, given the importance of the physical and psychosocial health of this population.

REFERENCES

1. International Labor Office – ILO, International Programme on the elimination of Child Labour. Every child counts: new global estimates on child labor. Geneva; 2002.
2. Instituto Brasileiro de Geografia e Estatística - IBGE. Pesquisa Nacional por Amostragem de Domicílios; 2010.
3. Ministério da Saúde (BR). Trabalho infantil: diretrizes para atenção integral à saúde de crianças e adolescentes economicamente ativos. Brasília: Ministério da Saúde; 2005.
4. Ministério da Saúde (BR). Estatuto da Criança e do Adolescente. Brasília: Ministério da Saúde; 2006.
5. Nobre LCC. Trabalho de crianças e adolescentes: os desafios da intersectorialidade e o papel do Sistema Único de Saúde. Ciênc Saúde Coletiva, 2003;8(4):863-71.
6. Centro de Referência em Saúde do Trabalhador de São Paulo - CEREST/SP. O compromisso do SUS na erradicação do trabalho de crianças e controle do trabalho adolescente. São Paulo; 2004
7. Organização Internacional do Trabalho - OIT. Módulo de auto aprendizagem sobre saúde e segurança no trabalho infantil e juvenil. Brasília: Ministério da Saúde; 2006.
8. Asmus CIRF, Raymundo CM, Barker SL, Pepe CCCA, Ruzany MH. Atenção integral à saúde de adolescentes em situação de trabalho: lições aprendidas. Ciênc Saúde. 2005;10(4):953-60.
9. Cruz Neto O, Moreira MR. Trabalho infanto-juvenil: motivações, aspectos legais e repercussão social. Cad Saúde Pública. 1998;14(2):437-41.
10. Brasil. Presidência da República. Trabalho Infantil no Brasil: questões e políticas. Brasília; 1998.
11. Barros RP, Mendonça R. Trabalho infantil no Brasil: rumo à erradicação. Brasília: Instituto de Pesquisa Econômica Aplicada; 2010.
12. Instituto Brasileiro de Geografia e Estatística - IBGE. Pesquisa Nacional por Amostragem de Domicílios: suplemento especial. Brasília; 2001.
13. Ministério do Desenvolvimento Social e Combate à Fome (BR). Orientações técnicas: gestão do programa de erradicação do trabalho infantil no SUAS. Brasília; 2010.
14. Ministério da Saúde (BR). Notificação de acidentes de trabalho fatais, graves e com crianças e adolescentes. Brasília; Ministério da Saúde; 2006.
15. Diário Oficial da Cidade de São Paulo. Lei 13.399: Dispõe sobre a criação de subprefeituras no município de São Paulo. São Paulo; 2002.
16. Organização Internacional do Trabalho - OIT. Convenção nº 182 sobre proibição das piores formas de trabalho infantil e ação imediata para sua eliminação. Genebra; 1999.
17. Campos HR, Alverga AR. Trabalho Infantil e ideologia: contribuição ao estudo da crença indiscriminada da dignidade do trabalho. *Estudos de Psicologia*, 2001;6(2):227-33.
18. Fassa, AG; Facchini, LA; Dall'agnol, MM; Christiani, DC. Child labor and health: problems and perspectives. *Int J Occup Med Environ Health*. 2000;6(1):55-62.
19. Lucarelli MDM, Lipp MEN. Validity of the child stress symptoms inventory. *Psicol Reflex Crit*. 1999;12(1):71-88.
20. Lipp MN, Romano ASF. O stress infantil. *Estud Psicol*. 1987;4:42-54.
21. Brasil. Portaria SIT nº 25, alterações / atualizações. NR 6: equipamentos de proteção individual. Brasília: Diário Oficial da União; 2011.
22. Fischer FM, Martins IS, Oliveira DC, Teixeira LR, Latorre MRDO, Cooper SP. Occupational accidents among middle and high school students in two small

-
- towns of São Paulo State, Brazil. Rev Saúde Pública, 2003;37(3):351-6.
23. Fischer FM, Oliveira DC, Nagai R, Teixeira LR, Lombardi Júnior M, Latorre MRDO, Cooper SP. Job control, job demands, social support at work and health among adolescent workers. Rev Saúde Pública. 2005;39(2):245-53.
24. Asmus CIRF, Barker SL, Ruzany MH, Meirelles ZV. Riscos ocupacionais na infância e na adolescência: uma revisão. J Pediatr. 1996;72(4):203-08.
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