

Analysis of the Financial Costs of a Health Promotion Program for Sexually Exploited Adolescents and Youngsters: The Case of the Vira Vida Program in Brazil

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Rodrigo Campos Crivelaro¹ , Everton Nunes da Silva²,
Miguel Barbosa Fontes³ and Dais Gonçalves Rocha¹

Abstract

The Vira Vida program promotes the health of adolescents and young adults, ages 16 to 24, who have been sexually exploited. It has served more than 3000 individuals in 18 Brazilian states. The objective of this research was to estimate the costs of Vira Vida and compare them with the costs of detention policies for juveniles under 18. This program cost study considers two periods: 2008 to 2012 (Cycle 1) and 2013 to 2014 (Cycle 2). The System S perspective and time horizon for one year were adopted. Direct costs incurred by the National Council of Industry Social Services, which coordinates Vira Vida, and by the Regional Departments (RD), responsible for the direct execution of Vira Vida, were analyzed. The cost of detention measures for adolescents and youngsters under the age of 18 was obtained from the literature. The annual cost per student enrolled in Vira Vida varied between US\$ 3754.93 and US\$27,244.48, depending on the cycle and the state. Most of the costs of the program were lower than those reported for detention measures for adolescents in Brazilian states. Evidence indicates that health promotion interventions targeting sexually exploited children and adolescents can help their recovery; on the other hand, studies indicate that detention measures do not help adolescents recover.

Keywords

costs and cost analysis, adolescents and youngsters, sexual exploitation, health promotion

Every day, millions of girls and boys experience sexual abuse and exploitation.¹ A consolidated index with data from 60 countries shows that sexual violence against this population occurs in all these countries, regardless of their level of economic development.² A recent systematic review³ indicates that the official data are not sufficient to provide a detailed picture of this problem. Evidence around the world reveals that the prevalence of child sexual abuse victimization can be up to 30 times higher than official reports, as violence against children is typically not a priority for official agencies. This phenomenon affects more girls.^{1,2,4,5} On the other hand, only one tenth of the countries studied monitor data on the prevalence of sexual exploitation against boys.¹

In Brazil, the scenario is no different. In 2018 alone, the Human Rights Hotline 100 received 76,216 complaints involving children and adolescents. Of these, 17,093 refer to sexual violence. Of this total, 13,418 are cases of sexual abuse, and complaints of cases of sexual exploitation reached 3675 cases. According to the Ministry of Health, sexual violence cases in the country totaled 184,524 occurrences between 2011 and 2017, with more than 58,000

against children (31.5% of the total) and more than 83,000 (45%) against adolescents. In the case of adolescents, 92.4% of the victims were female, and 67.8% were between 10 and 14 years old, with 55.5% of them black girls. Six out of every 10 records of sexual violence against adolescents occurred at home; moreover, 92.4% of the aggressors are men and 38.4% of them also had an intrafamily bond.⁶

Similar to the world scenario, the number of victims in Brazil is also greater than the records indicate. This may be due to underreporting or other factors, such as the fear of denunciation due to direct or indirect contact with the

¹University of Brasília - UnB - Faculty of Health - Collective Health, University of Brasília, Brasília, Brazil

²Collective Health, University of Brasília (UnB) – Faculdade de Ceilândia, Brasília, Brazil

³Instituto Promundo, Brasília, Brazil

Corresponding Author:

Rodrigo Campos Crivelaro, University of Brasília, Collective Health L4 Norte, Campus Darcy Ribeiro, S/N Brasília 70910-900, Brazil.

Email: rodrigolara@gmail.com

perpetrators of the crime, ignorance of the existing channels for reporting, and fear of involvement with the police or the judicial system.^{6,7} Even though this problem was severely emphasized in the Brazilian Penal Code and the Child and Adolescent Statute (ECA),⁸ it still affects thousands of children, adolescents, and young adults in Brazil and is especially aggravated by the conditions of low income, gender, and skin color, since most of the exploited are girls, poor, and black.⁶

Sexual abuse is defined as “any form of sexual relationship or sexual game between an adult and a child or adolescent, with the aim of satisfying that adult and/or other adults. It can occur due to physical or verbal threat, or manipulation/seduction”.⁹ Sexual exploitation, on the other hand, involves sexual abuse and violence for commercial purposes and whose intermediary is the seducer, a person who profits from selling sex with boys and girls.¹⁰

Commercial sexual exploitation was classified into four modalities: (a) trafficking for sexual purposes, (b) prostitution, (c) sex tourism, and (d) pornography. The living conditions of sexually exploited girls and boys are contextualized by multiple and serious vulnerabilities. Social exclusion, weak civil rights, socioeconomic issues, and socio-demographic aspects are vulnerability that strengthen its multidimensional character.¹¹ They are plural dimensions and encompass the “essence” of these girls and boys.

A recent systematic review noticed a marked scarcity of studies reporting specific health promotion strategies for the studied population.¹² In the period from 1990 to 2018, only 21 articles were found. Eleven programs evaluated are from the United States, and there is one program from each of the following countries: South Africa, Zimbabwe, Indonesia, Canada, India, Netherlands, Democratic Republic of Congo, Colombia, Cambodia, and the United Kingdom. None of the evaluated programs identified in these studies occurred in Brazil, and none of the authors is Brazilian. Finally, the different aspects and levels of effectiveness of the interventions studied were grouped into five main categories:

1. Focus on social or health services - four articles/programs evaluated
2. Intensive case management models - four articles/programs evaluated
3. Psychoeducational therapy groups - three articles/programs evaluated
4. Residential programs - five articles/programs evaluated
5. HIV/AIDS risk reduction and income transfer, among others - five articles/programs evaluated

Study sample sizes ranged from 10 to 3,401, and 20 of the 21 evaluated programs were aimed at girls and young women. None of the studies reported outcome data exclusively for sexually exploited children and adolescents, and none of the 21 mentions costs. Cost studies of a health promotion intervention can help to strengthen decision-making processes, as well as the detailed management of the program or policy.

The Vira Vida program, implemented by the National Council of Industry Social Services (SESI), aims to promote the health of adolescents and young adults 16 to 24 years old who were sexually exploited. It operates in 18 Brazilian states and the Federal District. The program has already served more than 3000 adolescents and young adults, with support from the Regional Departments of SESI (RDs) and implemented through partnerships with other System S institutions. System S is represented by a set of service organizations that have their own regulations and receive federal taxes on a regular and compulsory basis to guarantee their operation. About 75% of those in the program are girls, most of whom self-identify as black and brown, with the majority in families with incomes up to two minimum wages. Half have not completed high school, and 25% have been drug addicts.

Vira Vida has five main axes. The first is related to health, including diagnosis of the needs for health services and psychosocial and clinical care in the units of the program. The second refers to the family, through reconstruction and strengthening of family and community bonds. The third deals with technical education, through the vocational programs provided by the System S. The fourth is the mainstream education axis, through reintegration into regular education or the education for juveniles and adults (EJA), including academic support. The fifth and final axis is employability, with placement in the formal labor market and monitoring, based on partnerships with institutions in the business, governmental, and civil society spheres.¹³ Underpinned by the concept of health promotion, the implementation of intersectoral aspects of Vira Vida favors the holistic conception of the participants, by offering them favorable living conditions.¹⁴

Vira Vida encompasses actions and directly interfaces with all the principles of the National Health Promotion Policy¹⁵: equity, autonomy, empowerment, intra-sectorial actions, sustainability, integrality, multi-strategy actions, holistic conception, territoriality, and social participation. In addition, the program is organically involved in implementing the United Nations Agenda 2030, as it touches several Sustainable Development Goals, such as SDG 3—health and well-being, SDG 1—reduce poverty, SDG 4—quality education, SDG 5—gender equality, SDG 10—reduce inequality, SDG 11—sustainable cities and communities, and SDG 17—partnerships and means of implementation.

The primary objective of this study is to estimate the costs of the Vira Vida program from a System S perspective at 2019. As a secondary objective, we seek to compare the costs of the program with the costs of detention policies for juveniles under 18 years old.

Materials and Methods

This is a cost study of the Vira Vida program, which has operated in Brazil since 2008. The study followed the methodological recommendations published nationally and

internationally on the cost of disease.^{16,17} The cost estimates considered two specific periods of the program: 2008 to 2012 (Cycle 1) and 2013 to 2014 (Cycle 2). The System S perspective and the time horizon for one year of duration for each program cycle were adopted.

All costs analyzed belong to the category of direct costs according to the conceptualization of disease cost-of-illness studies,^{16,17} including expenses with human resources and social costs, administrative items (water, electricity, rent, internet, telephone, etc), consumables, transport and accommodation (fares, per diems), educational material and training, and third-party services (information technology, development and maintenance of software and hardware).

This article has produced as part of a doctoral thesis in progress,¹⁸ approved in Technical Report 3.414.071, November 2019, Registration Number 14535019.0.0000.0030, Ethics Committee from the Faculty of Health of University of Brasilia.

Cost of the Vira Vida Program and Data Sources

The cost data came from two secondary data sources: The National Council (NC) of SESI, their headquarters, which coordinates the Vira Vida program; and the RDs responsible for the direct execution of the Vira Vida program. In Cycle 1, 11 RDs participated, which expanded to 16 RDs in Cycle 2. In both study cycles, the total cost of the program was obtained by the sum of three components: (a) NC resources transferred directly to the RDs to execute the program, mainly toward the cost of multidisciplinary teams composed of psychologist, educator, and social worker as well as scholarships paid to students, teaching materials, and training of the teams; (b) the resources directly from the RDs applied to the program to complement the NC resources, including student scholarships, food, transportation, water, electricity, telephone, and other administrative costs; and (c) NC resources directed to the coordination and supervision of the program, such as NC staff, travel, and outsourced services for the program. Coordination and supervision costs were apportioned between the RDs. The criteria for apportionment changed between the two cycles because it was based on the number of students enrolled in each RD and the period of entry into the program. Higher coordination and supervision costs were attributed to the RD with the most students enrolled and who started earlier in the program. The total cost of the program per cycle was divided by the number of students enrolled, obtaining the primary result of the study.

All cost data were reported by the NC and the RDs in both cycles, reflecting the prices for 2012 (Cycle 1) and 2014 (Cycle 2). These values were adjusted to December 2019 prices and converted to the purchasing power parity of

2019, the last year available on the World Bank website (purchasing power parities conversion factor = 2.247).

Cost of Juvenile Detention and Data Sources

To compare the average costs per student of the Vira Vida program, a literature review was conducted on the cost of detention measures that restrict the freedom for juveniles under the age of 18. A survey conducted by the Ministry of Women, Family and Human Rights was identified, covering the 27 federative units in Brazil.¹⁹ The study data refer to the monthly cost, which was multiplied by 12 months to obtain the annual cost.

Seven types of socio-educational modality are included in the Child and Adolescent Statute (ECA—*Estatuto da Criança e do Adolescente*)⁸: warning, damage remediation, provision of community services, and probation; semi-confinement; confinement; and provisional confinement. Of these, only the last two include continuous loss of freedom. Confinement is the most severe measure of all measures provided for in ECA for depriving adolescents of their freedom to come and go. The measure has a maximum term of three years, with evaluation every six months. When the limit of three years is reached, the adolescent is released and, depending on the case, is still subjected to the measure of semi-confinement or probation. It occurs mainly in cases of crime committed through violence or serious threat, recurrence in serious violations, and non-compliance with other measures already imposed. The second modality is Provisional Confinement, a precautionary socio-educational measure applied before the sentence, when there is sufficient evidence of the perpetrator of the crime.

The National System of Socio-Educational Assistance (SINASE) of the federal government indicates that the teams of professionals needed vary according to the different socio-educational modalities. In the case of confinement measures,²⁰ the minimum team to assist a group of up to 40 adolescents must be composed of: one director, one technical coordinator, two social workers, two psychologists, one pedagogue, one lawyer, and other professionals necessary for the development of health, schooling, sport, culture, leisure, professionalization, administration, and socio-educators.²⁰ However, this is the minimum team. The teams and actions of each care unit may vary according to the peculiarities of each territory, such as the care unit's infrastructure, location, and level of social control in each territory.

So, in fact, we are not comparing the Vira Vida program with a fully standardized socio-educational system. We compared the program costs with estimated costs in the 27 Brazilian states, for individuals under 18 years of age in confinement and temporary confinement.

Cost data were extracted from the modalities of confinement and temporary confinement of adolescents (per capita), 2017, from the Annual Survey of SINASE.¹⁹ The

Table 1. Characteristics of Students Enrolled in the Vira Vida Program by Cycle, Brazil.

Profile questions	Cycle 1 (collected in 2012)	Cycle 2 (collected in 2013)
Total number of students enrolled	2195	1179
age	16–21 years old: 84%	16–21 years old: 91%
	22–24 years old: 16%	22–24 years old: 9%
sex	male: 28%	male: 30%
	female: 72%	female: 70%
sexual orientation	not heterosexual: 17%	not heterosexual: 19%
	heterosexual: 83%	heterosexual: 81%
schooling	elementary education: 44%	elementary education: 41%
	high school education: 56%	high school education: 56%
	higher education: 0%	higher education: 3%
continuing their studies	yes: 73%	yes: 71%
	no: 27%	no: 29%
color	white: 13%	white: 15%
	black: 26%	black: 22%
	brown: 51%	brown: 51%
	other: 10%	other: 12%
personal income	up to \$276.81 (1 MS): 68%	up to \$322.21 (1 MS): 89%
	from \$276.82 to U\$ 553.63 (1 to 2 MS): 9%	from \$322.22 to \$644.41 63 (1 to 2 MS): 8%
	do not know/do not want to state: 22%	do not know/do not want to state: 2%
	other ranges: 1%	other ranges: 1%
family income	up to \$276.81 (1 MS): 44%	up to \$724.00 (1 MS): 54%
	from \$276.82 to U\$ 553.63 (1 to 2 MS): 26%	from \$322.22 to \$644.41 63 (1 to 2 MS): 31%
	do not know/do not want to state: 19%	Do not know/do not want to state: 4%
	other ranges: 11%	other ranges: 11%
religion	Catholic: 40%	Catholic: 32%
	evangelical: 27%	evangelical: 32%
	believes in God, but has no religion: 26%	believes in God, but has no religion: 26%
	other: 7%	other: 10%
participate in a religion	yes: 54%	yes: 56%
	no: 46%	no: 44%
sexual orientation	not heterosexual: 18%	not heterosexual: 18%
	heterosexual: 82%	heterosexual: 82%
past chemical addiction	yes: 25%	yes: 25%
	no: 75%	no: 75%
have been through any institutional treatment related to chemical dependency	yes: 13%	yes: 1%
	no: 88%	no: 89%
currently works	yes: 30%	yes: 25%
	no: 70%	no: 75%
took a professional course in the last 3 months	yes: 58%	yes: 53%
	no: 42%	no: 47%

information that makes up this survey was provided by each of the country's 27 federated units (26 states and the Federal District) and later validated by the SINASE Coordination in 2018. In relation to costs, these include expenses with food, health, education, and maintenance, such as electricity and water, among other expenses. There is no report on the cost methodology adopted in each federated unit.

Results

Table 1 shows the characteristics of students enrolled in the Vira Vida program during the two cycles considered in this

study. Although the program expanded the number of RDs that implemented the program in Cycle 2 (from 11 to 16 RDs), the number of students enrolled was lower in Cycle 2 (2195 vs 1179). The most common characteristics of the students were between 16 and 21 years old, female, heterosexual, brown, with elementary education (nine years of education, from literacy to ninth grade), with income up to one minimum wage, and without chemical dependency.

Tables 2 and 3 provide the cost estimates of the Vira Vida program for Cycles 1 and 2, respectively. In both cycles, the largest part of the resources invested in the program came from the NC, either through direct transfers to the RD or

Table 2. Total and Average Costs of the Vira Vida Program in Cycle 1 (2008-2012), Brazil.

Regional Departments (RD)	Cost with RD funds (US\$) (a)	Cost of NC funds passed to RD (b)	Apportionment of CN coordination costs (c)	Total Cost of program (d) = (a) + (b) + (c)	Number of students (e)	Average cost per student (US\$) (f) = (d)/(e)
RD 1	218,710.50	583,883.57	234,540.32	1,037,134.40	215	4823.88
RD 2	823,319.98	1,424,121.05	316,254.92	2,563,695.95	386	6641.70
RD 3	174,166.69	877,578.99	289,016.72	1,340,762.41	143	9375.96
RD 4	291,614.01	928,626.45	289,016.72	1,509,257.17	200	7546.28
RD 5	66,043.61	890,075.66	234,540.32	1,190,659.60	196	6074.79
RD 6	347,459.16	1,927,013.80	316,254.92	2,590,727.88	279	9285.76
RD 7	497,463.28	1,093,975.78	234,540.32	1,825,979.39	115	15,878.08
RD 8	145,807.00	689,808.63	234,540.32	1,070,155.96	285	3754.93
RD 9	168,004.59	472,834.28	152,825.74	793,664.61	66	12,025.22
RD 10	131,063.01	1,585,235.67	316,254.92	2,032,553.60	229	8875.78
RD 11	14,959.95	398,200.99	152,825.74	565,986.67	81	6987.49
Total	2,878,611.79	10,871,354.87	2,770,610.97	16,520,577.63	2195	8297.26

Note: RD = Regional Department, responsible for the local implementation of the Vira Vida program; NC = National Council of SESI, responsible for the national coordination of the Vira Vida program. Costs were adjusted for inflation (IPCA), representing values from December 2019. Subsequently, these values were converted to the purchasing power parity of 2019, last year available on the World Bank website (PPP conversion factor = 2.247).

Table 3. Total and Average Costs of the Vira Vida Program in Cycle 2 (2013-2014), Brazil.

Regional Departments (RD)	Cost with RD funds (US\$) (a)	Cost of NC funds passed to RD (b)	Apportionment of CN coordination costs (c)	Total Cost of program (d) = (a) + (b) + (c)	Number of students (e)	Average cost per student (US\$) (f) = (d)/(e)
RD 1	0.00	0.00	524,221.94	524,221.94	105	4992.59
RD 2	0.00	178,015.13	564,162.67	742,177.80	113	6567.94
RD 3	25,089.45	445,037.83	534,207.13	1,004,334.41	107	9386.30
RD 4	180,726.13	592,845.93	289,570.22	1,063,142.28	58	18,330.04
RD 5	63,213.73	222,518.91	214,681.37	500,414.01	43	11,637.53
RD 6	47,266.97	0.00	239,644.32	286,911.29	48	5977.32
RD 7	97,908.32	532,377.84	579,140.44	1,209,426.60	116	10,426.09
RD 8	0.00	406,314.88	499,258.99	905,573.88	100	9055.74
RD 9	0.00	356,030.26	404,399.79	760,430.05	81	9388.02
RD 10	0.00	342,109.48	364,459.07	706,568.54	73	9679.02
RD 11	0.00	1,068,090.79	239,644.32	1,307,735.10	48	27,244.48
RD 12	0.00	0.00	384,429.43	384,429.43	7	4992.59
RD 13	0.00	356,030.26	499,258.99	855,289.26	100	8552.89
RD 14	0.00	311,526.48	354,473.89	666,000.36	71	9380.28
RD 15	0.00	186,930.09	0.00	186,930.09	0	0.00
RD 16	0.00	178,015.13	194,711.01	372,726.14	39	9557.08
Total	414,204.61	5,175,843.02	5,886,263.56	11,476,311.19	1179	10,344.53

Note: RD = Regional Department – responsible for the local execution of the Vira Vida program; CN = National Council of SESI – responsible for the national coordination of the Vira Vida program. Costs were adjusted for inflation (IPCA), representing December 2019 figures. Subsequently, these figures were converted to the purchasing power parity of 2019, the last year available on the World Bank website (PPP conversion factor = 2.247).

for coordination and supervision costs, through apportionment of costs. Another pattern common to both cycles was the high variability in average costs per enrolled student. In Cycle 1, the average cost per student was US\$8297.26 (all dollar amounts in U.S. Dollars) per year, ranging from \$3754.93 to \$15,878.08. In Cycle 2, the annual average cost per student was higher than in Cycle 1, estimated at

\$10,344.53. The variation increased between the RD, varying between \$4992.59 and \$27,244.48 per year.

Table 4 provides data on the cost of detention measures for adolescent offenders obtained from the survey conducted by the Brazilian federal government in 2017. The table indicates that 19 Brazilian states had annual costs in excess of \$13,351.13 annually per adolescent in the confinement, the

Table 4. Monthly Cost per Adolescent (per Capita), 2017.

Monthly cost per adolescent (per capita), 2017 (in US\$)		
Monthly cost per adolescent	Confinement	Temporary confinement
No information	04	05
667.56 to 1112.59	04	04
1112.60 to 2225.19	05	05
2225.20 to 3115.26	04	04
3115.27 to 4450.39	05	04
Over 4450.39.00	05	05
Total	27	27

Costs were adjusted for inflation (IPCA), representing values for December 2019. Subsequently, these values were converted to parity with the purchasing power of 2019, the last year available on the World Bank website (PPP conversion factor = 2.247).

most restrictive measure detention, and 18 for provisional confinement. In five Brazilian states, these annual costs could reach more than \$53,404.54 per adolescent in the same modalities, almost five times greater than the average cost per student in the Vira Vida program in Cycles 1 and 2, considering present values.

Discussion

This study addressed a neglected topic in the literature about the costs of a health promotion program aimed at sexually exploited adolescents and young adults. The program served a highly vulnerable population, with few opportunities for social inclusion. The absence of comprehensive policies to overcome this adverse condition can mean social exclusion of this population or even entry in criminality. That is, in this association, the implication for public policies seems direct. Where there are no rescue, prevention, and health promotion programs for this population, we will have more and more underage people involved in crime²¹ and inserted in confinement policies, which cost more than health promotion interventions. It's relevant to emphasize that the costs are a fundamental aspect in the decision-making process of policymakers.

The ECA⁸ is unique. Originally, the investments made in the socio-educational system created by the ECA are carried out with the aim of recovering juvenile offenders and including them in society. However, this expectation has not been fulfilled. Studies give evidence in the opposite direction. The restrictive measures of freedom do not recover adolescents and young people, but worsen situations of vulnerability.^{22–24} The socio-educational system applied to this model is overcrowded²⁵ and does not fully comply with the provisions of the ECA and other laws intended for this population.²⁵ Thus, recidivism rates are high²⁶ and increase the chances of these adolescents remaining in criminal activity as adults.

On the other hand, the Vira Vida program represents a complex health promotion intervention. It acts on five

different fronts of action, aligned with the principles of the National Policy for Health Promotion in Brazil and responding to all the gaps in the systematic review by Moynihan, Pitcher and Saewyc,¹² in order to be a reference of intervention in the field of health promotion for sexually exploited adolescents and young people.

This study does not intend to suggest that the socio-educational system is completely ineffective in fulfilling its mission of recovering and reintegrating boys and girls. However, it is suggested that the formulation, implementation, and evaluation of public policy in the socio-educational field of young offenders should be directed toward good practices and innovations based on the paradigm of health promotion.

The costs of the Vira Vida program were compared to detention measures for adolescent offenders. This research found that the annual cost per student enrolled in the Vira Vida program varied between \$3754.93 and \$27,244.48 per year depending on the cycle and the RD considered. The vast majority of the costs of the program were lower than those reported in Brazilian states for the confinement of adolescents. Evidence indicates that interventions aimed at sexually exploited children and adolescents can contribute to their recovery,¹² while other studies indicate that confinement measures do not lead to the recovery of adolescent offenders.^{22,27}

Most Brazilian adolescents and young adults do not have their basic rights met,²⁸ especially those who are black and poor,^{26,29,30} where the public policy response to confront violence has evidenced greater capacity to protect whites.^{31,32} Despite advances in the reduction of social inequalities, especially in the expansion of schooling and in the increase in the number of jobs for the population between the ages of 15 and 17, the state and society still have an unfilled social debt to this population.²⁸ Within the scope of these new labor and employment policies, the majority is geared toward training for low-wage employment.³⁰ Considering that almost 100% of this young working population in Brazil is already poor, work in this age group is related to not only climbing out of poverty, but also having access to consumer goods.^{33,34} Youth from the periphery are invited to commercial consumption, but not to decent work³⁵ and to the possibilities of education, culture, well-being, and civil consciousness, as promised by the ECA.⁸ This absence of concrete conditions for the protection and promotion of opportunities by the state makes easier targets for trafficking, which entices these girls and boys to crime.²⁸

In 2013, a total of 23,100 adolescents were in detention in Brazil. Of these, 64% (15,200) endured confinement, the most severe measure; another 23.5% (5500) were in provisional confinement; 9.6% (2300) received semi-confinement; and 2.8% (659) were detained in an undefined situation.³⁶ Among those, the main types of crimes committed were theft (39.9%), trafficking (23.55%), and homicide (8.75%), which account for about 70% of the total cases.²⁸

The costs per student varied widely among the RDs in both cycles of the Vira Vida program. Several factors could explain this difference. First, the RDs that carry out Vira Vida in SESI-owned schools tend to have a lower cost than those that carry out the program in public schools or rented spaces. SESI schools already have infrastructure for care, such as classrooms, rooms for psychological care, and leisure facilities (sports areas or parks). Second, the food provided to students is cheaper in SESI schools, as it caters to students in basic and elementary education and not only the participants of Vira Vida (gain in scale). Third, there are significant differences in the cost of living and regional inequities in Brazil,³⁷ which are reflected in the different wage levels between cities for professionals essential to the program, such as psychologists, social workers, and teachers. Outsourced and public transport services also influenced the variation in average values per student among the RDs. Fourth, RD 7 in Cycle 1 needed to renovate the physical spaces for the program activities, which resulted in a high cost in that RD in the first cycle. On the other hand, RD 8 presented the lowest cost in Cycle 1 due to a series of factors. This RD implemented the program in three cities, two in the interior region. In Brazil, the interior usually has a considerably lower cost of living than the capitals.³⁸ RD 8 probably also had considerable partnerships with institutions in the System S and businesses that reduced the need for direct investments. In Cycle 1, RD 8 was the only one in Brazil to be implemented in three cities.

In Cycle 2, RDs 1 and 2 and RDs 8 to 16 did not make their own investments. All the resources used came directly from the NC or via the apportionment costs of the NC itself. These RDs had to seek partnerships with companies and other institutions in the System S to complement the total costs required. Most of these partnerships are not characterized by financial resources, but by in-kind donations, which are through acquisition and offer of items such as infrastructure, technology, food, and personnel. Financially, they did not represent funding for the NC or the RDs. In Cycle 2, RD 15 did not have students enrolled at the time of data collection, as it was still in the planning phase of its activities for later implementation. However, direct investment had been made by the NC for the preparation phase of the Vira Vida program in the respective territory before its execution, so we decided to include these expenses in the total cost estimate of the program.

The difference in the costs of the Vira Vida program between Cycles 1 and 2 reflects changes in the design of the program. The evaluation results applied in Cycle 1 of the program elucidated to the management of Vira Vida the need to increase the intervention time to respond to verified gaps. This requirement to adjust the intervention model, expanding it from 12 to 18 months, with more multi-sectorial and multi-strategies, responded to the challenge of solidifying the effects of the program on the lives of adolescents and young adults. It can be said that Vira Vida adapted to the

context “as a gigantic modifying agent”¹⁶ of its planned intervention. For the second cycle of intervention, this meant increasing the direct investment of the NC, as well as entering into more partnerships with companies. In this way, students and RDs were added to Vira Vida—from 11 to 16—more individual and community therapy assistance, more psychosocial and work support, more interfaces to strengthen the participants’ relationships with their families and communities, and more efforts to place them in the formal labor market. Such factors also generated an increase in average costs per student.

Strengths and Limitations of the Study

To the best of our knowledge, this was the first study to estimate the cost of a health promotion program aimed at sexually exploited adolescents and young adults. Information on costs is essential to the process of drafting public policies, adding a dimension about the resources necessary for their implementation. Nevertheless, some limitations of the study should be pointed out. First, our estimates were based on retrospective data, which may contain some inaccuracies, particularly in the apportionment of NC coordination and supervision costs in Cycle 1. Second, it was not possible to itemize costs by expense item (human resources, educational material, health care, overhead, etc), as this information was not available in the NC or the RDs. Third, the estimates were restricted to the costs incurred by the NC and RD, excluding any partnerships with local companies that could provide specific support to some cost component.

Implications for Health Promotion Policies

Measures to combat sexual exploitation should encourage implementation of the principles of health promotion, such as comprehensive care, guaranteeing actions of a multi-strategic and sustainable nature.³⁹ For this, resources, efforts, and coordinated actions⁴⁰ from the government, business, and organized civil society sectors are necessary, considering the socio-environmental approach to health promotion, which is committed to tackling the determinants of this very complex problem. The strategies prioritized by the Vira Vida program signal paths for public policy to work with this theme.

Investment in research that broadens the scope of promotion programs is important, since the systematic review presented¹² showed that the surveyed interventions were not inter-sectoral and exhibited restrictions on some dimensions of health promotion. Hence, the urgency to move forward in the scope of evaluating health promotion programs should promote studies not only of cost, but also of effectiveness.

The cost survey or the difference in cost between the RDs, per se, does not represent the success or failure of the program in the territories in which it was conducted. The variation in costs is related to the competence of the those involved, but also to different costs of living in cities, local

social inequities, spaces where it was carried out, and quantity and quality of the partnerships involved. Variation in student cost is not the only impactful aspect of the program. Participants from cities with more vulnerable social indicators may have received weaker versions of Vira Vida, outside SESI schools, with less extracurricular activities or a higher turnover of professionals, for example, but with more significant transformation impacts than those with lower cost or better management. The simple fact that Vira Vida occurred in these places may represent more significant social gains for young adults in these places, as opposed to cities that have a more consolidated performance of the program or a network of social support services that complement the performance of Vira Vida.

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ORCID iD

Rodrigo Campos Crivelaro  <https://orcid.org/0000-0002-6620-0406>

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Author Biographies

Rodrigo Campos Crivelaro received his PhD in Collective Health (2022) from University of Brasília. Currently he is Director of the JSBrasil, one of the leading consultancies on social research and M&E, in Brazil. He also collaborates with Promundo, one of the leading organizations in men's involvement in fatherhood and early childhood care around the world. He has 20 years of experience in research, monitoring and evaluation of programs and policies.

Everton Nunes da Silva received his PhD in Economics from the Federal University of Rio Grande do Sul in 2008. Currently, he is professor of Public Health at the University of Brasília, Brazil. He has 15 years of research experience working with health economics, health technology assessment and public policy evaluation.

Miguel Barbosa Fontes received his PhD in Public Health from the Johns Hopkins University, United States. He is the founder of Promundo, one of the leading organizations in men's involvement in fatherhood and early childhood care around the world. He also has experience in Social Impact Assessment (SIA), and has worked on a number of child and youth development projects. His field of expertise is the development of sustainability strategies in Latin America and the United States.

Dais Gonçalves Rocha received her PhD in Public Health (2001) from University of Sao Paulo, Brazil. Visiting Professor (2014) in School of Health Population at University British Columbia-Vancouver Canada. Currently I am Academic Advisor and professor at the Department of Public Health, Faculty of Health Science, University of Brasília, Brazil.