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The impact of para-professional social workers and community health care workers in Côte d'Ivoire: Contributions to the protection and social support of vulnerable children in a resource poor country

Andrew M. Muriuki [a,*], Tamarah Moss [b]

[a] Save the Children, USA
[b] Howard University School of Social Work, United States

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ABSTRACT

Background: Research indicates a disproportionate impact of HIV and AIDS in sub-Saharan African countries, leading to many vulnerable families and children. Many of these communities have limited resources to support these vulnerable families, especially orphans and vulnerable children (OVC).
Study aims and objective: This study set out to investigate how para-professional social workers and community health workers (PSWCHW) impact the provision of services and the psychosocial wellbeing and protection of vulnerable children in the community.
Methods: This quasi-experimental research study used data from an independent Save the Children program evaluation study in Côte d'Ivoire. We compared the health and psychosocial wellbeing of identified vulnerable children supported by para-professionals (n = 334) and children not receiving para-professional support (n = 213).
Findings: Support services and activities provided by PSWCHW included encouraging the children to be part of psychosocial support groups. Many of the children reported legal issues that ranged from getting a birth certificate issued to fighting or quarrelling with adults, disputes, public insults, beatings, and refusing to go to school. We found that the engagement of PSWCHW helped three out of four children go to school (compared to only one in four of the children without PSWCHW). PSWCHW also helped the children improve access to health care services.
Conclusions: Communities in sub-Saharan Africa should continue to consider the integrated utilization of para-professional social workers and community health care workers to support and improve psychosocial wellbeing of orphaned and vulnerable children which, in turn, enhances child protection services and access to healthcare.

1. Introduction

In many low-income and resource poor countries in the world, a large population of vulnerable people are in need of legal aid, social support, and health care services (Christopher, Le May, Lewin, & Ross, 2011; Hermann et al., 2009; Linsk et al., 2010). Many of these countries are also constrained by poor infrastructure and limited capacity to support their vulnerable population. Access to social and health care workers at the local level is important in addressing the needs of these communities. Some countries are now turning to community caregivers or para-professional social and health care workers to address this gap. Even though community caregivers, para-professional social workers, and para-professional community health care workers may have different roles and responsibilities, in practice many have overlapping roles in terms of support, care, and treatment. This study highlights the needs of orphans and vulnerable children, particularly those living with HIV, and the critical role these para-professionals play in their lives. The authors propose to redefine these workers and/or volunteers as para-professional social workers and community health care workers (PSWCHW). The community definition is important, since they work at the community level and are supervised by a professional.

1.1. Children in Africa

Worldwide, an estimated 153 million children had lost one or both parents by 2007, and of this number, about 17.8 million children were orphaned due to AIDS (UNICEF, 2013). Only half of the children living with HIV receive treatment (UNAIDS, 2014).

* Corresponding author.

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About 85% of these 17.8 million AIDS orphans live in sub-Saharan Africa (UNICEF, 2013). Côte d'Ivoire has one of the highest adult rates of HIV prevalence in West Africa, estimated at 3.7% (UNAIDS, 2012). HIV-related orphans and vulnerable children in Côte d'Ivoire are estimated to number 410,000; 61,000 of them are living with HIV (PEPFAR, 2012b).

1.2. Children and family vulnerability

Vulnerable children have been defined as those who are most at risk of facing increased negative outcomes (PEPFAR, 2006, 2012b; Pillai, Sunil, & Gupta, 2003). For the purposes of this study, *vulnerability* is defined as "exposure to contingencies and stress and difficulty coping with them" (Chambers, 1989, p. 33). The degree and type of vulnerability faced by children may be influenced by the risk and stress characteristics to which they are exposed. External vulnerability refers to the risks, shocks, and stressors; internal vulnerability refers to lack of resources for coping with these stressors. External vulnerability links biophysical and socio-economic factors, while internal vulnerability is related to lack of resilience and the inability to act or plan for the future.

Many African countries that have experienced high HIV prevalence rates have also experienced an increase in the levels of vulnerabilities of the children in their communities (Grinspun, 2005; Lalor, 2004; Leatherman, 2005; Luginaah, Elkins, Maticka-Tyndale, Landry, & Mathui, 2005). Orphaned and vulnerable children (OVC) include heads of households (having lost one or both parents), living with HIV/AIDS, who are sent to the streets and are daily in situations of commercial sexual exploitation (Ferguson & Heidemann, 2009). These orphaned and vulnerable children face problems ranging from institutionalized care and duplication of services to food insecurity and lack of access to basic needs such as medical care, clothing, and shelter (Okaalet, 2007). Orphans are more likely to engage in survival activities that may include prostitution and crime and have limited access to basic education (Caruso & Cope, 2006).

Researchers and policy makers have understood that vulnerability could have an impact on early child development (Taylor & Kvalsvig, 2008). A study by Orkin, Boyes, Cluver, and Zhang (2014) examined the link between HIV/AIDS and associated indicators of poverty that could impact children, affecting educational outcomes, including enrollment, attendance, deficiencies in progression, and problems related to the ability to concentrate (Orkin et al., 2014). HIV/AIDS could indirectly impact a child's educational outcomes due to poverty and mental health issues. A recent World Health Organization (2005) report reviewed factors that could influence early child development, including stimulation, support and nurturing, care, and development as well as safe community and socio-political factors that impact actions in community health care and access to social service professionals (Maggi et al., 2005).

1.3. Role of community volunteers/para- professionals – para-social workers and community health workers

Historically, the social work profession was based on community volunteers in the community who helped in assessment and implementation of support services (Simon, 1994). They lived in the community and helped to address both social and health care outcomes. They were advocates for the vulnerable population in their community.

The current work by international para-professional social and community health care workers is in line with the early work of social work practices (Cox & Pawar, 2006). Many African governments and local and international NGO (non-governmental organization) funded programs and partnerships have utilized para-professional social workers to address the needs of vulnerable children in their communities (Linsk et al., 2010; Peel, 2010). Levels of HIV/AIDS in the community may impact or limit the workforce or the capacity to provide services. Using para-professionals could be an effective strategy to mitigate this circumstance (Taylor & Kvalsvig, 2008). The selection and identification of para-social workers and community health workers in many Africa countries is not standardize at the country level or the NGOs that run those programs. While identifying the usefulness and effectiveness of para-social workers and community health workers at the community level a number of studies have noted the absence of a clear guidelines and support for these hard working community workers (Cox & Pawar, 2006; Linsk et al., 2010; Taylor & Kvalsvig, 2008).

1.4. Culture and mental health revisited

There continues to be a need for mental health assessment, especially in children living with HIV in African countries (Idoniboye, 2008). Understanding culturally-relevant and strengths-based approaches is necessary to address the complexity of communities, which include OVC and their families, to develop and provide supportive interventions (Skovdal, 2012). The use of PSWCHW addresses the issue of cultural competence in the service delivery model for these vulnerable groups. Sensitivity to the cultural issues improves access to the OVC and their access to services (Airhihenbuwa & Webster, 2004). Understanding culture will equip practitioners to find a point of entry into a community and allow them to construct relationships and expectations within the community that are empowering and respect the community identity.

1.5. Para-professionals in practice and implications for social work and public health

Good para-professional social workers are trained in providing care that is child-focused and family centered via an "ongoing process of assessment, care-management, service coordination, quality improvement, capacity-building, and direct support" (Linsk et al., 2010, p.996). They support communities that are underdeveloped or have a severely stretched social welfare system. Community-based workers have been very effective in addressing community health issues (Christopher et al., 2011; Hermann et al., 2009). They have helped to address a wide range of issues, including psychosocial support, adherence to HIV treatment, and nutrition education to support early childhood development (Taylor & Kvalsvig, 2008). Clinical adherence, mental health, sexual health and social spheres must be included in the provision of care for children living with HIV (Pegurri et al., 2015). Social work and public health care intersect when supporting households at the community level (Beard, 2005; Friedman, 2005; Hermann et al., 2009). Evidence-based interventions strengthen resilience among OVC (Heath, Donald, Theron, & Lyon, 2008).

1.6. Limitation of current social workers and health workers

When serving large populations of people in need of social and health care services, the scale of the needs is often disproportionate to the number of available trained professionals to support them. Resource positioning for both the short and long term can be a challenge when the problem is epidemic. Studies have shown that community-based PSWCHW have often able to deliver a wide range of interventions that can achieve large gains in child survival and improve health outcomes in sub-Saharan Africa (Christopher et al., 2011; Hermann et al., 2009; Mukanga et al., 2010). Trained social and health care workers that work with para-professionals may be more effective in serving communities not only because of the number of people in need of support but also because of issues of culture and access to hard-to-reach communities.

1.7. Study aims and objectives

The study sought to understand how para-professional social workers and community health care workers (PSWCHW) impact the psychosocial wellbeing and protection of vulnerable children receiving

support services. The study compares services and support of OVC programs in Côte d'Ivoire, those provided by NGOs and those with the additional support of PSWCHW. All the programs provided for OVC were similar, except that the intervention group included PSWCHW in their service delivery model. The PSWCHW assisted the OVC with both psychosocial and healthcare/medical support.

2. Methods

2.1. Study design

This study used data from the Côte d'Ivoire Community Caregivers (2013) study (Muriuki, Andoh, Newth, Blackett-Dibinga, & Biti, 2016), collected by Save the Children, an international non-governmental, non-profit organization. The Côte d'Ivoire Community Caregivers study data included interviews and survey data collected from OVC, guardian/parents, and para-professionals. Only the cross-sectional survey data collected from the children was used for this study, using a quasi-experimental design to compare intervention/control data from three regions in Cote d'Ivoire: Indenié-Djuablin (Abengourou), Guémon (Duékoué), and Tonkpi (Danané) (Fig. 1). Data from Lagune (Abidjan) and Kabadougou (Odienné) areas were not included, since a control group was not available in those areas. The intervention group included 314 children who received support from PSWCHW; the control group had 213 children.

2.2. Sample

The participants were selected through a three-stage process. First, regions were selected based on the number of PSWCHW in the participating program in the region and the number of vulnerable children in those regions. The PSWCHW group was then selected, using data

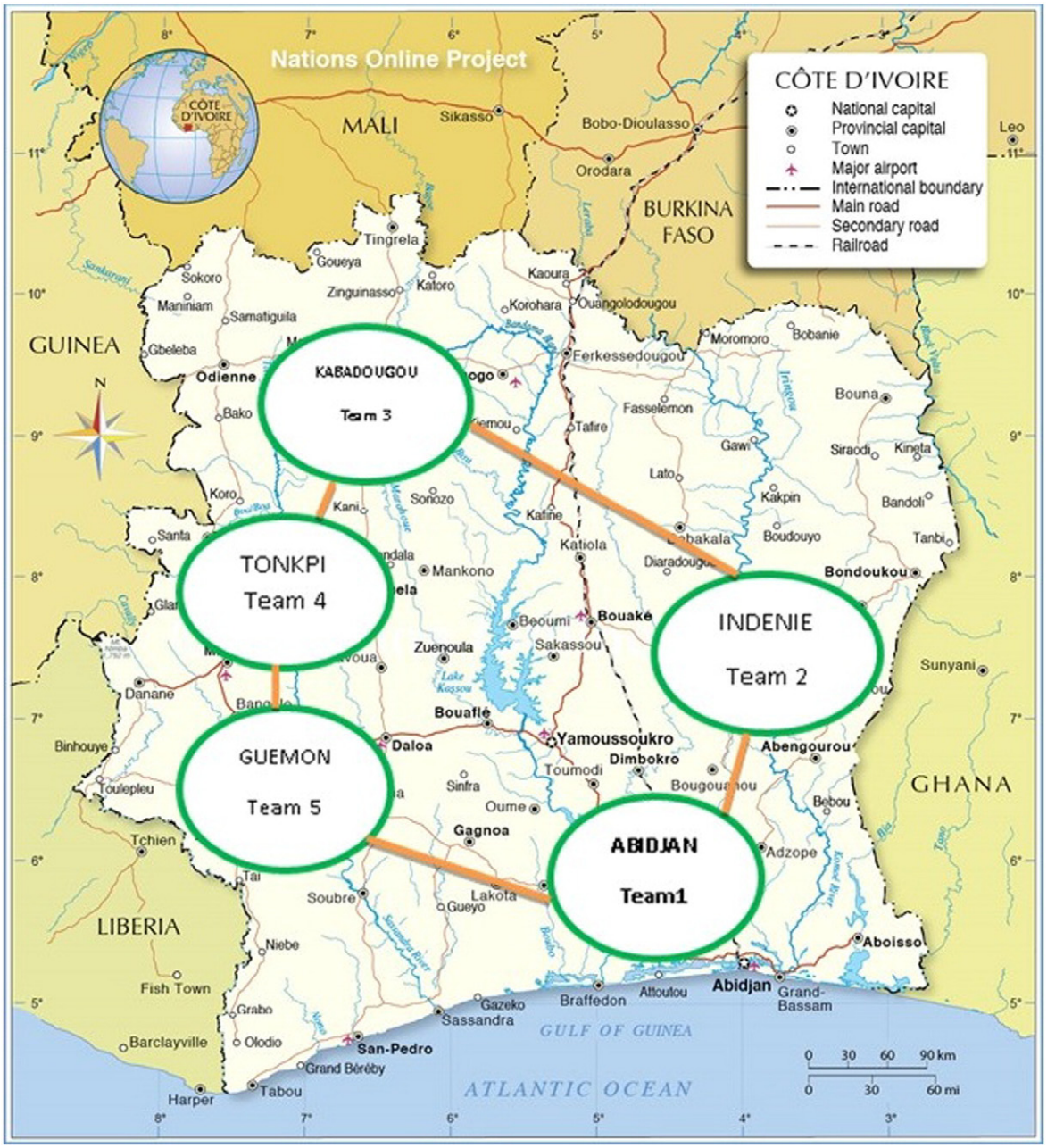

Fig. 1. Map & the distribution of research sites in Côte d'Ivoire (UN Geospatial Information Section, 2011).

provided by Save the Children offices in Côte d'Ivoire, and matched with the households they serve. PSWCHW were randomly selected and stratified by region. Finally, the control group (supported by NGOs with similar demographic attributes but not supported by PSWCHW) was selected.

The majority of the children enrolled in programs were HIV +, lived in a household with someone identified as HIV +, or engaged in risky behavior that increased their chances of HIV infection. Proof of HIV status was provided before enrollment in the OVC program for both the intervention and control groups.

For each household selected for the intervention and control groups, the vulnerable household was selected and then a child was identified for review. If there were more than one child in the household, only one was selected to be in the study and preferable the oldest child in the household. Parents or guardians were questioned when children were unable to talk.

2.3. Ethical considerations

The research study was reviewed by Save the Children in Côte d'Ivoire and followed the standard child safeguarding protocol set by them. All research investigators, supervisors, and field interviewers reviewed and signed the Child Safeguarding Policy requiring researchers to have an agreement framework that protects the confidentiality of the research participants. Participation in the study was voluntary and informed consent was provided. The consent form was also read and explained in the local language. Data were placed in a secure and locked location at the Save the Children office. All identifiable information was removed and (in keeping with WHO guidelines for ethical standards and procedures) only summary and aggregate data have been analyzed, presented, or shared (WHO, 2011).

2.4. Programming for OVC in Côte d'Ivoire

Children in the OVC program in Côte d'Ivoire were identified through multiple avenues, including Voluntary Counselling and Testing (VCT) Centers, Prevention of Mother to Child Transmission (PMTCT) services, associations of people living with HIV, or social centers. The support services received by OVC were based on needs identified during home visits, using consistent measures that identify all children in need regardless of gender. Most OVC programs provide a layered support system to assist the children and their family's access to a number of services. These services include child protection, health and nutrition, capacity building, education, household economic strengthening, legal protection, psychosocial care, and social protection (PEPFAR, 2012a).

2.5. Instruments and data collection

The Côte d'Ivoire Community Caregivers (2013) study questionnaires were designed to capture seven indicators of social support (food and nutrition, health, education and apprenticeships, psychosocial support, legal and child protection, shelter and care, and household economic strengthening) and two clinical indicators (HIV testing and adherence to HIV treatment) (PEPFAR, 2012a). The questionnaire had 124 items that included demographic information and the indicators listed above. The questionnaire was based on the Child Status Index that was used to identify the vulnerable children for the NGO in the study (Belay & Radeny, 2009; Peel, 2010). Most areas of OVC support also included multiple embedded programs. For example, legal and child protection may include birth registration, permanent placement, or removal from abusive situations.

This study focused on psychosocial support, education, legal support, and health care to investigate the impact of PSWCHW. These intervention support areas were chosen for their impact and data completeness. These specific indicators also highlight the impact of the PSWCHW on the children in the study.

2.6. Measures

The study assessed the number of social services and health care services accessed by participants. The total number of psychosocial support, education, legal support, and health care services received was compared by gender between the two groups.

2.6.1. PSWCHW social support

Social Support three outcomes were used to investigate the impact of PSWCHW. The respondents were asked if they had ever been supported in education, legal issues, and psychosocial well-being. Each social support measure represented an aggregate of multiple services provided to children in that area. For example, children may need a number of support programs to ensure they can attend school. They may need a birth certificate, school fees, uniform, books, and an adult going to the school to ensure they can attend. The study included school attendance, legal support, and being a member of a support group for the psychosocial measure.

2.6.2. PSWCHW health care support

Similarly, the study used information from the survey that asked the respondents if they had ever received health care or medical support. Information about adherence to HIV treatment also served to highlight the health care support of the children in the study.

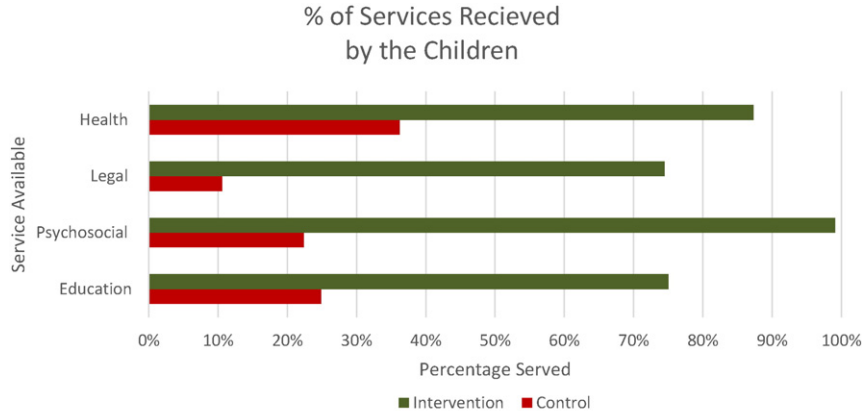

Fig. 2. Percentage of services received by the children. *Note*: Estimates are based on unweighted data from the sample data.

2.7. Data analysis

Data analysis was completed using SPSS version 22.0. Bivariate (Pearson chi-square statistic) and multivariate (logistic regression) analyses were carried out on the social and clinical indicator data that were collected. Summary descriptive statistic and logistic regression models were used to investigate the impact of PSWCHW on the children receiving services from the local NGOs in the study area. The study investigated the impact of PSWCHW on the number of social services (education, psychosocial, legal) accessed by the children and health (adherence to HIV treatment). Children supported by PSWCHW were compared with children that did not receive any support from PSWCHW (PSWCHW Intervention = 1, Not = 0). Demographic variables (gender and age) were used as control. The study used three models to investigate to investigate the impact of PSWCHW. Model 1 was to check for the significance of age and gender on the intervention of PSWCHW. Model 2 compared on the total of services received. Model 3 investigate if they had received any of the social and/or health services.

3. Findings

The study compared the two groups on the four services received (Fig. 1). The study observed that children supported by PSWCHW accessed or were served at a higher rate than the control group. The gap in service rate was greatest in psychosocial support and least for education. The difference in the number of services received was 50% or higher for all the services in the study (Fig. 2).

The intervention group had more girls (53%) than boys, while the control group had slightly more boys (51%), but the gender differences were not significant. The average age of the children in the study was 11.0 years (SD = 4.0) for the intervention group and 10.3 years (SD = 4.1) for the control group; the difference in age was significant (Tables 1).

3.1. Access to services

We used χ^2 tests of independence to compare PSWCHW-supported children to those with only NGO support on the three social services and one health care measure (Table 2). Findings show that PSWCHW-supported children were significantly more likely to attend school, receive psychosocial services and legal services, and access health care. Education support χ^2 (1, N = 537) = 129.84, $p < 0.001$, psychosocial support χ^2 (1, N = 543) = 357.12, $p < 0.001$, legal support χ^2 (1, N = 537) = 208.09, $p < 0.001$ and health support χ^2 (1, N = 541) = 152.98, $p < 0.001$ had significant reported association with PSWCHW.

The study assessed additional aspects of the four measures. These include attending school [χ^2 (1, N = 538) = 5.31, $p < 0.021$], participating in a support group [χ^2 (1, N = 516) = 113.37, $p < 0.001$], resolving legal issues and receiving legal support [χ^2 (1, N = 532) = 134.30, $p < 0.001$] and adherence to treatment1 [χ^2 (1, N = 321) = 45.19, $p < 0.001$] that were also significantly associated with PSWCHW supported children.

Table 2
Impact of PSWCHW on social and clinical outcomes compared to the control group[a].

Social outcomes	Intervention (n = 335)		Control (n = 213)		p-Value[b]
	Yes (%)	No (%)	Yes (%)	No (%)	
Education support	246 (75)	82 (25)	52 (25)	157 (75)	***
School attendance	233 (71)	96 (29)	128 (61)	81 (39)	*
Psychosocial support	330 (99)	3 (1)	47 (22)	163 (76)	***
Participating in a support group	175 (54)	149 (46)	14 (7)	178 (97)	***
Legal support	245 (75)	84 (26)	22 (10)	186 (89)	***
Resolving & receiving legal support	187 (58)	135 (42)	17 (8)	193 (92)	***
Health support	289 (87)	42 (13)	76 (36)	134 (64)	***
Adherence to HIV treatment	55 (47)	63 (53)	26 (13)	177 (87)	***

[a] Estimates are based on unweighted data from the sample data.
[b] ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

We reviewed bivariate association between the two groups (PSWCHW Intervention = 1, No = 0) in the study (Table 3). There was very little bias observed on services provided between genders. Each of the interventions was strongly correlated with PSWCHW support except for support to attend school. Those attending school were significantly associated with PSWCHW, younger children, number of services provided and psychosocial support but not for receiving health and legal support.

We next estimated the difference between PSWCHW-supported children and those receiving only NGO support using logistic regression methods. Table 4 summarizes the results of the models drawn from the sample.

After adjusting for the demographic variables, it appears that having PSWCHW support increased the odds of children receiving education support (OR = 3.64, 95% CI 1.80, 4.13), psychosocial support that include peer group support, counselling in medical, mental health and nutritional education (OR = 134.94, 95% CI 57.02, 1048.39) and legal support that included receiving support in resolving legal issues and receiving legal advice (OR = 2.31, 95% CI 1.14, 4.67). PSWCHW support was also associated with increased odds accessing more service (OR = 2.8, 95% CI 2.37, 3.33).

4. Discussion

This research does show PSWCHW were very effective in improving access to services for the children they supported, but their face barriers in their efforts to strengthen strained health and social delivery systems. In particular, paraprofessional social workers employed by local NGOs face lack of human and final resources, as well as difficult working conditions which may be described by large caseloads, low status and negative perceptions from the public and other professionals (Vise-Lewis, Krueger, Thompstone, & Quigley, 2012). Community health workers (CHWs) also face particulate barriers related to community perceptions. For participants in one study taking place in Kenya, CHWs were perceived as having the inability to provide confidential services, which

Table 1
OVC distribution by regions and gender.

	Intervention N = 335		Control N = 213		p-Value
	Male (%)	Female (%)	Male (%)	Female (%)	
Indenie-Djuablin	48 (31%)	56 (32%)	32 (29%)	38 (36%)	
Guemon	61 (39%)	72 (40%)	42 (39%)	33 (32%)	
Tonkpi	48 (31%)	50 (28%)	35 (32%)	33 (32%)	
Mean age (years)	11.0 (SD = 4.0)		10.3 (SD = 4.1)		
Gender (male = 0, female = 1)	0.53 (SD = 50)		0.49 (SD = 0.50)		

Note. a) All children = $\chi^2 = 0.88$, df = 2. Control = $\chi^2 = 0.51$, df = 2. All children mean age $p = 0.051$. b) Numbers in parentheses indicate column percentages. Estimates are based on unweighted data from the sample data. c) *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 3
Correlation between intervention, gender, age and the service received[a].

	Intervention	Gender	Age	# of services received	Education	Attend school	Psychosocial support	Member of a social support group	Legal support	Resolving & receiving legal support	Health services
Gender	0.04	–									
Age	0.08	0.07	–								
# of services received	0.61***	0.06	0.02	–							
Education	0.49***	0.03	0.22***	0.42***	–						
Attending school	0.10**	−0.09	0.17***	0.10*	0.37***	–					
Psychosocial support	0.81***	0.03	0.07	0.64***	0.44***	0.11*	–				
Participating in a support group	0.47***	0.07	0.17***	0.46***	0.38***	0.03	0.44***	–			
Legal Support	0.62***	0.03	0.18***	0.55***	0.54***	0.06	0.64***	0.34***	–		
Resolving & receiving legal support	0.50***	−0.02	0.10*	0.48***	0.40***	0.06	0.41***	0.24***	0.680***	–	
Health support	0.53***	−0.01	−0.00	0.58***	0.35***	0.06	0.58***	0.339***	0.45***	0.326***	–
Adherence to HIV treatment	0.36***	−0.01	0.20***	0.37***	0.22***	0.07	0.42***	0.255***	0.38***	0.308***	0.39***

[a] Estimates are based on unweighted data from the sample data.
*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.

ultimately prevents community members' linkage to and management of health care (Rachlis et al., 2016). The authors go on further to report that given the case that CHWs are seen as a part of the community, community members are fearful of recognition especially in the context of their health status (Rachlis et al., 2016, p. 8). At the core of these barriers exist the lack of defined roles and responsibilities for these paraprofessionals in their specific country context, and Côte d'Ivoire is no exception.

Linsk et al. (2010) showed that PSWCHW could fill gaps in serving the needs of children and families in resource-poor communities. The competency-based training model they described could be replicated in other countries. Although the primary focus of their study was on para-professional social workers who worked in resource-poor environments, the training could be refocused to include all the services PSWCHW perform in their community.

Table 4
Summary of logistic regression analysis for variables predicting PSWCHW impact on children service by NGO ($N = 548$)[a].

Variable	Model 1	Model 2	Model 3
	OR (*CI*)	*OR* (*CI*)	*OR* (*CI*)
Age	0.87 (0.61, 1.23)	0.93 (0.53, 1.63)	0.86 (0.92, 1.07)
Gender	1.05 (1.00, 1.09)	1.03 (0.97, 1.10)	0.99 (0.46, 1.63)
# of services received		2.8 (2.37, 3.33)***	
Education support			3.64 (1.80, 7.37)***
Attending school			
Psychosocial support			134.94 (38.53, 472.67)***
Participating in a support group			
Legal support			2.31 (1.14, 4.67)*
Resolving & receiving legal support			
Health support			1.95 (0.92, 4.13)**
Adherence to HIV treatment			
Model χ^2	701.64	318.22***	269.21***
Pseudo R^{2b}	0.01	0.53	0.56

[a] Estimates are based on unweighted data from the sample data.
[b] Cox and Snell R^2.
*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.

Strasser and Gibbons (2014) showed that mental health and psychosocial support have not progressed as steadily as biomedical expertise in HIV/AIDS care and treatment. Child malnutrition and pediatric HIV continue to be major issues (Jesson & Leroy, 2015). Children who have lost both parents to AIDS have a higher risk of non-adherence to treatment, which increases when the sibling is the caregiver (Kikuchi et al., 2012). Given the stigma associated with HIV and mental health implications faced by adolescents living with HIV (Mutwa et al., 2013), the need for psychosocial support becomes even more important; providing health care providers and caregivers with the necessary skills is essential (Strasser & Gibbons, 2014).

PSWCHW can be influenced by the larger cultural and political environment in which they work. Their motivation to work and continue to work may be influenced by the community. Their status in the communities may be influenced by age, gender, ethnicity, and even economic status. This status will affect how they are perceived by community members and their ability to work effectively (Bhattacharyya, Winch, Leban, & Tien, 2001). Since PSWCHW are recruited from the community, they are also influenced by the cultural context of the community they came from. For many African countries, there are many ethnic groups with different cultural issues may that differ from one community to the other. The communities may differ on their views of women, and/or children members. Some communities define certain tasks by gender and age of the individuals. The ability to address the head of the household or to talk people in a public place maybe a function of age and gender. These issues may affect the social status of PSWCHW that are mixed with other traditional roles that differ from community to community.

This study showed that children supported by PSWCHW receive or access services at a higher level than children with no PSWCHW support. This finding is not only consistent with prior research but adds to argument for consistently using PSWCHW in programming service delivery for vulnerable children. This finding helps support community-based health care research that has shown PSWCHW help to address a wide range of issues for the vulnerable population, from psychosocial support to adherence to HIV treatment for the population they serve (Pegurri et al., 2015; Taylor & Kvalsvig, 2008) PSWCHW were able to address issues of adherence to health care and to provide supportive mental health interventions, sexual health education, and ways to navigate cultural social spheres to ensure community needs were served (Beard, 2005; Friedman, 2005; Hermann et al., 2009; Pegurri et al., 2015). Their community knowledge helped them use individuals' and family strength to assist them (Heath et al., 2008). Consistent use of

PSWCHW may improve child well-being outcomes for resource-poor countries and may also improve data collection opportunities for their most vulnerable.

5. Limitations of the study

There were a number of limitations to the study. Although the PSWCHW were randomly selected, the sample was restricted to those served by the Save the Children program in Côte d'Ivoire. Children in the control group lived in the same area as the PSWCHW-supported children. Participants were identified for inclusion with the help of PSWCHW knowledge of the community they worked in, and the community perception of their roles were not assessed during the research process. Further research is needed to study the impact of paraprofessional support services for OVC in other communities of Côte d'Ivoire.

6. Conclusion

All communities in sub-Saharan Africa should consider using PSWCHW in their social and health care service delivery model. This is especially critical now as social protection of children continues to be urgent, given the communities that have been hard hit by HIV/AIDS, in sub-Saharan Africa (Adato & Bassett, 2009). As part of the policy recommendation to address globalization and health worker crisis, in a 2007 the World Health Organization has encouraged training for CHWs, public health workers and paraprofessionals (Packer, Labonté, & Spitzer, 2007). The need for practice professionals specifically, need to be acknowledge as part of the successful workforce development. The importance of this acknowledge supports the establishment of defined roles, recognition, certification, compensation and supervision linked to legal and professional systems (Linsk et al., 2010).

It should be noted that PSWCHWs have local community knowledge and are culturally aware para-professionals who have access to those in need of support. The United Nations International Children's Emergency Fund (UNICEF, 2013) reports that understanding the meaning of child safety and protection in the local community is key and a response that includes paraprofessionals is essential (Davis, McCaffery, & Conticini, 2012). System strengthening approaches requires moving from national policies and laws into local action with the capacity strengthening of workforce where paraprofessionals are included as part of this network.

An integrated utilization system of PSWCHW will strengthen community health care and social support services. PSWHW will have an important role in improving the psychosocial wellbeing of orphaned and vulnerable children, which, in turn, will enhance child protection services in the communities they serve. The development of life skills in schools and health promotion policies in various settings are critical for healthy social, emotional, and physical outcomes among OVC and the providers that serve them. Continued support of research on the important role of PSWHW in the lives of vulnerable communities is needed, especially where children are involved.

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