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Mechanisms for achieving adolescent-friendly services in Ecuador: a realist evaluation approach

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Background: Despite evidence showing that adolescent-friendly health services (AFSs) increase young people's access to these services, health systems across the world are failing to integrate this approach. In Latin America, policies aimed at strengthening AFS abound. However, such services are offered only in a limited number of sites, and providers' attitudes and respect for confidentiality have not been addressed to a sufficient extent.

Methods: The aim of this study was to explore the mechanisms that triggered the transformation of an 'ordinary' health care facility into an AFS in Ecuador. For this purpose, a realist evaluation approach was used in order to analyse three well-functioning AFSs. Information was gathered at the national level and from each of the settings including: (i) statistical information and unpublished reports; (ii) in-depth interviews and focus group discussions with policy makers, health care providers, users and adolescents participating in youth organisations and (iii) observations at the health care facilities. Thematic analysis was carried out, driven by the realist evaluation approach, namely exploring the connections between mechanisms, contexts and outcomes.

Results: The results highlighted that the development of the AFSs was mediated by four mechanisms: grounded self-confidence in trying new things, legitimacy, a transformative process and an integral approach to adolescents. Along this process, contextual factors at the national and institutional levels were further explored.

Conclusion: The Ministry of Health of Ecuador, based on the New Guidelines for Comprehensive Care of Adolescent Health, has started the scaling up of AFSs. Our research points towards the need to recognise and incorporate these mechanisms as part of the implementation strategy from the very beginning of the process. Although contextually limited to Ecuador, many mechanisms and good practices in these AFS may be relevant to the Latin American setting and elsewhere.

Keywords: *adolescent health*; *realist evaluation*; *mechanism*; *qualitative research*; *health systems*; *sexual and reproductive health*; *gender*; *Latin America*

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Health care services can play an important role in responding to adolescents' health needs; they can provide good information for young people, treat those who are ill, and reach those who are in vulnerable situations (1–11). For health services to be able to fulfil a beneficial role, they need to be available, accessible, acceptable and equitable from different youth sub-populations, what the World Health Organization (WHO) describes as adolescent-friendly health services (AFSs) (6, 11, 12).

Despite research evidencing that AFS contributes to better adolescents' health, worldwide health systems are failing to institutionalise this approach (2, 3, 11, 13). Even in countries where public health systems perform well, health care for young people remains a neglected topic and one in which clear guidelines and real political will appear to be weaker than in other areas (2, 6, 11, 14).

Transforming 'ordinary' health care facilities into AFS can be considered a complex innovation. An innovation comprises 'new ideas, practices, objects or institutional

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arrangements perceived as novel by an individual or a unit of adoption' (15, p. 106). Complex innovations are harder to adopt within the health systems, and need strong stakeholder investment and user engagement (15–17). In the case of AFS, the complexity of the innovation does not lie in the need for costly and highly specialised technologies, but rather in the dynamic character of adolescent health needs, which are not limited to the biomedical sphere – in which the medical profession is trained – but also encompass social–psychological issues (2, 6, 11, 18). As Greenhalgh points out, there are diverse factors influencing the adoption of innovations, both at the individual level and related to the intervention and health system (16, 19). Atun's framework for analysing the integration of innovations in health systems describes five interconnected components that influence the extent of adoption of an intervention: (i) nature of the problem, (ii) intervention, (iii) adoption system, (iv) health systems characteristics and (v) context (15). The literature has extensively explored factors hindering and facilitating adolescents' access to health services, focusing especially at the individual level (namely service providers and/or adolescent users); however, there is a scarcity in published research exploring factors that influence the integration of AFS within health care services and systems, and particularly the social mechanisms that explain how and why integration does or does not occur (20).

AFS in the Andean region and Ecuador

In Latin America, policies and programmes designed to strengthen AFS abound; however, they face several challenges (6, 15, 18, 21, 22). An evaluation conducted by the Pan American Health Organisation evidenced that even if several initiatives aimed at implementing AFS have been developed across Latin America, such services are offered only in a limited number of sites, and providers' attitudes and respect for confidentiality have not been addressed to a sufficient extent (23).

The most recent initiative aimed at strengthening AFS in Latin America is the Andean Plan for Adolescent Pregnancy Prevention (2007–2012) (24). Led by the Ministries of Health (MoHs) of the six Andean countries – Venezuela, Colombia, Ecuador, Peru, Bolivia and Chile – it aims to promote adolescents' rights and to improve their access to health care services. Backed by this Plan, the MoHs of these countries have in recent years intensified efforts to increase the number and improve the quality of AFS country-wide (21). This entails integrating AFS within existing health facilities that are expected to adopt certain changes to facilitate adolescents' access, such as differentiated times, alternative entrances and/or separated consultation rooms. The present study focuses on Ecuador, a country where the aims and strategies of the Andean Plan have been eagerly incorporated into the national health system (25), and explores the mechanisms that triggered the transformation of an 'ordinary' health care facility into an AFS. Although the WHO defines adolescents as boys and girls from ages 10 to 19, Ecuador's Child's and Adolescents Code defines them from ages 12 to 18 (26). The group served by AFS in Ecuador is not clear-cut and can range from ages 10 to 19 or even older.

Methods

The realist evaluation approach

A realist evaluation is a type of theory-driven evaluation (27) that focuses on understanding processes instead of simply measuring outcomes. Based on Pawson and Tilley's work (28), it is gaining recognition within public health research (29, 30–40).

While traditional evaluations usually follow the assumption that a particular intervention leads to certain outcomes, realist evaluation challenges this straightforward path between an intervention and its outcomes by incorporating two key elements: context and mechanisms. Interventions do not happen in a vacuum, but under particular circumstances, which are dependent upon local, national and global dynamics. Following realist evaluation, interventions are not directly responsible for outcomes, but rather there is 'something else' that intermediates between the intervention and the outcome, and that can be triggered (or dampened) by the context. This 'something else' is what realist evaluation has named 'mechanisms' (28, 35, 37, 41). These mechanisms are not external entities (such as the components of an intervention); mechanisms are internal forces that move individuals – or health care teams, in our case – to achieve certain outcomes. Mechanisms are not the inherent attributes of individuals but rather are created through the interaction of individuals (or organisations) with one another and with the particular context in which they are developing the interventions (29). While the concept of mechanism seems to be a key one in realist evaluation, and particularly useful in terms of results transferability, authors differ on the way they conceptualise them [for a discussion of different conceptualisations of mechanisms see (35)]. While for Pawson and Tilley a mechanism is 'not a variable but an account of the behaviour and interrelationships of the processes that are responsible for the change' [Cited by (40)], other authors considered mechanisms in a more concrete way, closer to what can be labelled as components of the intervention (42, 43). In this study, we considered mechanisms as the triggering forces for change that occur within health care teams, not spontaneously, but mediated by their interaction with contextual factors in developing the intervention. As Anderson et al. and Astbury describe, mechanisms can run from macro to micro (situational),

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micro to micro (action-formation) or micro to macro (transformational) (20, 41).

The present study is based on three health services located in different settings in Ecuador and uses a realist evaluation approach to explore four interconnected aspects: (i) the interventions carried out to improve adolescents' access to these services, (ii) the contexts – local, institutional and national – in which these interventions were implemented, (iii) the outcomes achieved in terms of accessibility/acceptability, good quality/relevance and gender equality and (iv) the mechanisms that triggered the transformation of three 'ordinary' health services into what are currently considered as national models of AFSs.

Study design: participants and data collection

Realist evaluation is not method-dependent: researchers use both quantitative and qualitative methods, many times pragmatically combining them (28, 29). In our study, we used mainly qualitative data collected through a variety of tools from diverse sources in order to better capture the complexity of the intervention and its different levels, including organisational, local and national levels as well as user and provider perspectives.

Data collection was carried out by the first author in Ecuador from December 2009 to March 2010. Contact with the informants was facilitated because she had previously worked in sexual and reproductive health and rights in Ecuador for 10 years. During the first step, information on the context and overall situation of AFS implementation was collected at the national level from 11 policymakers, through individual interviews. Grey literature which was relevant to our study, such as policies, guidelines and unpublished reports, was also collected.

During the second step, information was collected locally from three cases, namely three AFSs. We posed three criteria for the selection of cases: (i) the involvement of community-based health facilities; (ii) implementation over a minimum of 5 years and (iii) recognition for being successful. Regarding the latter criteria, all of the selected services were ranked among the best within Ecuador in an evaluation carried out by the MoH in 2007 (44).

The three selected cases were located in different cities in the coastal region (Los Barrios and Nueva Ciudad) and in the highlands (Chambil). Names of the cases have been changed to ensure confidentiality. Permission to visit and explore them was sought at both the national and local levels. One week was spent in each of the settings.

From each case, information was gathered on how and why AFSs were incorporated into the health care facility; the training and supervision process; how participants perceived the services provided, strengths and limitations; and the profile of the adolescents accessing (and not accessing) the services. Diverse data were collected from each case: (i) statistical information and unpublished reports; (ii) in-depth interviews and focus group discussions (FGD) with health care providers and adolescent members of youth organisations and (iii) observations of the health care facilities. FGDs were conducted with different types of informants (see Table 1) in which the number of participants ranged from 6 to 8. During FGDs, participants were asked to talk about the process of implementing AFS and their involvement. Discussion was encouraged and the moderator guided it by posing open-end questions such as 'How did the process of delivering AFSs start in this health center?' For a more detailed list of participants and methods used for data collection see Table 1.

We decided to evaluate the outcomes following the requirements written in the New National Guidelines for Integral Care for Adolescents (45). The study did not aim to assess the direct impact of AFSs on adolescent's health, but rather their quality and accessibility. Therefore, outcomes were assessed in terms of (i) availability and accessibility, with a focus on contact between adolescents and health care facility and staff; (ii) quality and relevance, which relates to responses to adolescents' health care needs, good services/information and satisfaction and (iii) gender equality promotion, which involved an examination of the extent to which services contributed to gender equality. Here, a gender equality approach means that the health care facility and staff took into account and sought to address the construction of gender relations in their particular context through their daily practice, as well as the consequences of gender power imbalances for adolescents health whereby certain men benefit and most women are disadvantaged (18).

Data analysis

Following thematic analysis, the collected information was distributed into four different datasets (23): (i) the first dataset included the information collected at the national level; while (ii) the other datasets each referred to one of the three AFSs explored. The authors read the transcripts and imported them into Open Code software in order to manage the coding process (24). The coding process was carried out using the original text in Spanish, and codes were produced line by line. Printed documents, such as policies, programmes or reports, were also coded. A list of codes was produced for each data set, and afterwards, we merged the codes together in order to integrate them into themes.

After the themes emerged, we proceeded to map them within the realistic evaluation framework. A table was developed, and the themes from each data set were arranged according to their reference to context, interventions, outcomes and mechanisms, in order to facilitate comparisons between the data sets.

Table 1. Participants, sources of data and methods for data collection

	Interviews and FGDs: participants and methods	Other data collected and type
National level	12 individual interviews: national stakeholders	Secondary data: National guidelines (old and new) Report Evaluation of AFS Report Evaluation of training workshops with health providers Form Clinical history for adolescents
Los Barrios	Four individual interviews: medical doctor, nurse, statistic department, NGO representative One FGD (six participants) members of youth organisation in the area	Secondary data: Report evaluation and systematisation Los Barrios Report elaborated on young people, sexuality and masculinities Observations: Observation in waiting room and during consultation with adolescents Informal interviews with users waiting: young men, young women, adult women
Nueva Ciudad	Five individual interviews: medical doctor, administrator, statistics department, paediatrician, NGO representative One FGD (eight participants) youth group working with AFS Nueva Ciudad	Secondary data: Report Internal evaluation Reports of workshops with young people Annual plans Presentations from health centre and youth group. Observations: General waiting room Adolescents' waiting room area Youth group room Consultation with adolescents-paediatrician Triage Informal interviews with users waiting: young girls, mothers
Chambil	Four individual interviews: medical director, nurse, midwife, MoH provincial representative One FGD (six participants) health team Chambil One FGD (seven participants) youth group working with AFS Chambil	Secondary data: Annual reports Reports of workshops with youth organisation Training materials for young people Observations: Workshop with health providers-adolescents' mental health Observation in waiting room Consultation with adolescents-midwife Informal interviews in waiting room: with young women, young men, adolescent mother after consultation

Ethical considerations

The study protocol was approved by the Bioethics Committee of the Central University of Ecuador. The idea for the study emerged during consultations with the national authorities in Ecuador, and the study protocol was presented to the National Commission for Adolescent Pregnancy Prevention. Afterwards, the representatives of the selected health facilities were approached and asked to participate, and the study protocol was sent to all of them. Prior to each interview or FGD, oral informed consent was sought from all of the participants, and they were assured their right to withdraw from the interview at any moment. Pseudonyms were used, and participants were informed that results would be reported as an aggregate with exemplar quotes, and that no individuals would be named. All the participants were 16 years of age or older. In the FGDs with youth groups, the researcher was presented by one of the health professionals of the unit (in two of the cases) and a representative of the non-governmental organisation (NGO) supporting the group (in one case). Personal questions were not posed, and the interviews concentrated on the implementation of AFS in the setting and their opinions of the process.

During observations, all of the persons involved were informed regarding the role of the researcher and the

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objectives of the study, and consent was elicited from all of the participants. When asking for consent from the adolescent users, a health provider was always present. The researcher left the medical office when a physical or gynaecological examination was carried out.

The preliminary results of this study has been shared to national and regional stakeholders, AFS providers and youth organisations both through a report in Spanish and workshops held in Ecuador in January 2012.

Results

This section is based on data collected through the individual interviews, FGDs and observations. Information gained from the document review is used to complement this section, especially regarding the contexts, outcomes and intervention.

National and institutional contexts

According to the findings, dominant socio-cultural norms in Ecuador privileged adulthood over adolescence. Adolescence was commonly understood an underdeveloped state, prone to risks and problems, especially regarding sexuality: adolescent was defined as an oversexualised period of life needing to be contained. These norms translated into strongly moralistic attitudes among adults regarding how adolescents should live their sexuality. At the wider societal level, gender relations were characterised by machismo (sexism), homophobia and the idealisation of motherhood.

However, this depicted just one part of the picture. Participants also portrayed Ecuadorian society as changing, and so were norms regarding adolescence. From previously being invisible in public policies and mass media, adolescents were currently gaining increased attention. These changes meant that older and newer approaches co-existed, both longstanding risk approaches as described above and emerging rights approaches that considered adolescents as autonomous subjects with a positive transformative potential. Years of work by activist groups and individuals, some of them currently holding influential positions in government, were perceived as the motors behind this transformation.

This process from risk-based approaches towards rights-based approaches to adolescents and health was also evident in the policies and programmes passed during the last 20 years in Ecuador. Shortly after its creation with the MoH in 1992, the National Programme for Adolescent Health developed a manual of norms and procedures for Comprehensive Adolescent Health Care. The manual was elaborated by medical professionals and had a biomedical approach. During the 1990s and early 2000s, the implementation of these norms in health care facilities was inconsistent and training of health professionals focused on filling in new records. Meanwhile, progressive non-profit organisations (hereafter referred to as NGOs) and international development agencies started supporting pilot projects that went beyond the implementation of the norms and the application of the forms, by connecting AFS with other initiatives such as sex education and youth organising. However, these successful initiatives were never scaled up, and when external funding ended, many disappeared (44, 45).

In the mid- and late 2000s, policies and programmes with a strong health rights approach were passed. The Children's and Adolescents' Code, passed in 2003, states that adolescents have the right to health, and should have free access to public health programmes; the national health system should provide high-quality health services free of charge for adolescents, and remains responsible for reporting any case of violence against adolescents (26). The National Policy and Plan for Sexual and Reproductive Health and Rights (2005), the National Plan for Adolescent Pregnancy Prevention (2007) and the New Guidelines for Comprehensive Care of Adolescent Health (2009) all refer to adolescents' right to health (25, 26, 44, 46). The New Guidelines promoted comprehensive care for adolescents' health, based on: (i) differentiated services delivered with a comprehensive, intercultural, participatory and rights-based approach; and (ii) friendly care encompassing respect, confidentiality and providers with positive attitudes, skills and competencies. The Guidelines stressed the importance of considering gender issues during the planning and implementation of services, and stressed that health services could and should contribute to gender equality (44).

In Ecuador, the agendas of adolescent health and of sexual and reproductive health have been closely connected and frequently entailed controversial public and political debates. The Catholic Church leadership and right-wing political parties remained influential in certain spheres of political power, but this too was changing. For example, while the Supreme Court banned the commercialisation of one brand of emergency contraceptives in 2006, the MoH responded by permitting the commercialisation of other brands (47). Another debate surrounded the formulation of the National Constitution in 2008 when youth organisations demanded a series of specific rights for young people including body sovereignty, which finally was partially adopted. Adolescents from 16 years of age have the right to vote, but strong debates continued about the maturity of adolescents and their autonomy (48).

Ecuador's health system – mainly defined as the MoH – reflected this process of being in transition. On the one hand, participants described what they labelled as the '*institutional culture of the Ministry of Health*', characterised by strong hierarchical relationships, bureaucracy, low motivation, poor self-image, weak leadership, a biomedical approach to health and a paternalistic-authoritarian approach to users. On the other hand, the

MoH was undergoing changes as a result of progressive forces pressing from regional and international bodies (Pan American Health Organization and other United Nations agencies), civil society (youth networks and progressive adult NGOs), and inside the MoH. The fact that a number of leadership positions within the MoH had been filled with individuals previously working in NGOs or international agencies was perceived as generating a more positive approach towards external resources and alliance-building. The incorporation of staff with non-medical backgrounds (i.e. anthropologists) seemed to back a more comprehensive approach to health and adolescents. National representatives of the MoH highlighted the achievements of local AFS initiatives and called upon their expertise for example on the development of the New Guidelines for Comprehensive Care of Adolescent Health.

> Until very recently adolescents were not visibilized [. . .]. Now it has been initiated. I think that it is still at a starting phase, but it's interesting, and I do believe that the Ministry of Health has changed regarding this issue [. . .] The previous Norms were too clinically oriented . . ., but now if you review the New Package of Guidelines, it includes the guidelines, protocols, and also a tool box with further information. Moreover, this was a process of collective construction; validation of the Guidelines was done together with social organizations, NGOs, adolescents' and youth groups . . . that gave a different approach. (National stakeholder 2)

Despite the existence of policies and programmes aimed to promote adolescents' right to health, funding to achieve this goal has been erratic and very dependent on external agencies. When this study was conducted, only two persons within the MoH were fully dedicated to the implementation and support of AFSs, one of them funded by a United Nation's Agency.

Local context(s) and interventions

The three AFSs which were explored were located in urban areas, and two of them (Los Barrios and Chambil) in neighbourhoods that were considered as marginalised and impoverished. They were all public services run by the MoH. In all three cases, the motivation for becoming an AFS had not emerged from the MoH, but rather from a combination of interest from the providers of the health care facility and the initiative of an external organisation: a local NGO in Los Barrios and international NGO in Nueva Ciudad and Chambil.

Implementing AFS was perceived as being a long process, which started with training activities directed towards the providers. This led to changes in the providers' perceptions and moved them to reconsider the arrangements at the health care facility in order to facilitate access for adolescents.

> We had a workshop together with adolescents . . . and they told us what they liked and what they disliked. They said that they didn't like the white coats, which they felt that was a marker of superiority. So, the doctor, she doesn't wear white coats any more . . . and the social worker's office is a small office with couches, no desk . . . to encourage communication. (Administrator, Nueva Ciudad)

In two of the cases (Chambil and Nueva Ciudad), these arrangements focused on developing promotional activities for adolescents, and led to the creation of an adolescents' group attached to the health care facility. In two of the cases (Nueva Ciudad and Los Barrios), the implementation of AFS led to the development of differentiated services for adolescents; in the case of Nueva Ciudad, this was done through a specific medical office which was put in charge of the growth and development of adolescents (but not issues of sexual health), while in the case of Los Barrios it was done through securing specific days and hours during which adolescents could visit the health care facility. For a brief description of each case, see Table 2.

The providers in these three cases had participated in the development of the New National Guidelines. They were also involved in developing and implementing training workshops on the subject of adolescent health for health care providers at the national level.

Outcomes

Statistical reports showed an increase in service use among adolescents, more pronounced in Los Barrios, followed by Nueva Ciudad. Nonetheless, lack of accurate data combined with inconsistent routines for registering data made quantitative comparisons between the three cases difficult. Regarding outcomes, we focused on qualitative information collected through observation, interviews and the revision of previous reports. The three cases explored had managed to get in contact with adolescents, both at the health facility and throughout outreach activities. However, when focusing on the three delineated outcomes, Los Barrios was the service that evidenced strongest achievements regarding the three outcomes, while Nueva Ciudad and Chambil showed some fulfilment of outcomes (i) availability and accessibility and (ii) good quality and relevance, but barely of outcome (iii) promoting gender equality. A summary of the outcomes for each of the cases can be found in Table 3.

The reasons for consultation were very diverse in Los Barrios, and they were all attended in the same medical office. In Nueva Ciudad and Chambil adolescents came either for monitoring growth and development or for prenatal checkups and family planning (the pregnant or mothering girls) – and the two reasons to visit were attended in different medical offices.

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Table 2. Main characteristics of the local context in the three explored cases

Los Barrios	Nueva Ciudad	Chambil
Small health centre (HC) in a marginalised area of a big city	Large HC, including some medical specialties	Small HC in marginalised area of small city
Started as women's HC: strong support from community and local NGO expert on gender and sexual and reproductive health	AFS started in 2004 with support from an international NGO	AFS started in 2005 with support from an international development project
Differentiated services for adolescents since 2002: one doctor attending during mornings	Currently there is an 'adolescents' zone' with the medical office for 'Growth and Development' attended by a paediatrician	No differentiated services, but certain arrangements for facilitating access by adolescents
Health promotion with schools	Adolescents' reproductive health is dealt with in the obstetric office, together with adult women	HC works with adolescents' organisation and schools
No adolescents' organisation at HC	HC works with adolescents' organisation and schools	All members of staff have been trained and they incorporate the new comers
General practitioner (GP) in charge is well-sensitised and trained	All members of staff have been trained and they incorporate the newcomers	

During the interviews with users and observation during consultation, the possibility of suffering violence – domestic violence, gender-based violence, bullying and/or sexual violence – was raised in Los Barrios, but not in the other settings. However, the providers in Nueva Ciudad indicated that the centre was part of a local network against violence. The need to involve young men was explicitly addressed in Los Barrios – they had engaged in formative research on masculinities and sexuality – and the young men using the service valued it.

> The fact that she [the doctor attending at the AFS] is a woman doesn't make me embarrassed …, what happens is that I trust her, that's what happens … I think is the way she opens up, so I feel like I could tell her anything …, she really listens to me, she is friendly … (Young men at waiting room in Los Barrios)

Mechanisms

Findings from the three cases pointed to four mechanisms that were central to the transformation of an ordinary health facility into an AFS: 'grounded self-confidence in trying new things', 'legitimacy', 'a transformative process' and 'an integral approach to adolescents'. The degrees of fulfilment varied, with Los Barrios being the most consolidated case.

Grounded self-confidence in trying new things

Self-confidence, achieved through training and support, externally provided enabled health providers in the three cases to feel secure enough to implement a service that was previously unfamiliar to them, and in which they had not been previously trained. In Los Barrios, providers' self-confidence went beyond replicating the activities contained in the Guidelines, into developing their own initiatives and adapting them in the course of the implementation.

This mechanism was facilitated by close support from people and organisations with extensive knowledge and a strong commitment to young people's health. This close support involved long processes of 'formación.'[1] The participants distinguished between processes of 'capacitación' (training), which were aimed towards the acquisition of knowledge and technical skills, and processes of 'formación', which facilitated more personal involvement, the recreation of the knowledge attained and an active process of assimilation and translation of this knowledge into practice.

> Just sporadic training workshops don't work. I mean, during our "formación" we made theatre, we presented hypothetic cases, we reflected upon the situation that we faced every day. This made as reflect and change the way we thought. We were formed on every aspect: from the way we greet the boy or girl, until what to prescribe … That process made the difference. (Nurse, FG team Chambil)

Legitimacy

This mechanism refers to the status that the AFS achieved. This varied in intensity between the three cases. Chambil and Nueva Ciudad developed an internal sense of ownership and pride based on years of teamwork among the staff at the centre. This together with community participation and health promotion (such as conducting home visits, supporting local health committees) led to community recognition of both health centres as offering good quality services and engaged with the community. Los Barrios' legitimacy was a more elaborated mechanism rooted in a long-term and close

[1]'Formación' can be literally translated into English as 'formation', however the meaning is closer to learning, empowerment, or expanding capacities. The authors could not find an accurate English translation of the Spanish term, that is why we decided to use the original Spanish word.

Table 3. Main outcomes in the three cases explored

	Los Barrios	Nueva Ciudad	Chambil
Previous evaluation MoH (2007)	95% Consolidated development All the components implemented effectively and a long time experience working with adolescents, with the support of an NGO. Adolescents participate actively during the entire consultation process, and staff is empowered. Recommended as centre of excellence for internships for other providers	96% Consolidated development All components adequately implemented. They have their own model of care. All the staff have received 6 months of training and half of the staff involved in providing care for adolescents at least for 1 year. Recommended as centre of excellence for internships for other providers	96% Consolidated development All components implemented efficiently, and with good quality. Recommended as centre of excellence for internships for other providers
Outcome 1	High number of adolescents Diversity of adolescents' profiles accessing the HC with a diversity of consultations	Adolescents come to the health centre. Few consultations regarding SRH. Work with schools.There is an adolescents' group	Not highly accessed by adolescents; the majority are pregnant adolescents or adolescent mothers. Staff from the facility visits some schools located in the vicinity. There is an adolescents' group that gathers periodically in the HC
Outcome 2	Constantly adapting to respond to adolescents' needs. Good reputation that attract many adolescents. No barriers for contraceptive access to adolescents. Referral system	Confidentiality and privacy ensured. Variety of contraceptives not always available. Majority of adolescents get consultations that focus on 'Growth and development' and less on SRH. Psychological and social services. Referral system working	Not many consultations from adolescents, besides the ones from pregnant adolescents and adolescent mothers. Contraceptives of different types are not always available Warmth relationship between pregnant adolescents and midwife. Staff willing to smooth consultation process when adolescents' arrive
Outcome 3	Adolescent boys access the services. Gender perspective incorporated during consultation. Gender based violence and sexual violence assessed and referral system exist	Gender approach not integrated. Direct strategies to attract boys not implemented. Part of a network against violence against women, but few cases detected. Homophobia is not addressed	Access for young men was not perceived as relevant. Adolescents who attend the HC were pregnant girls or mothering girls. Violence against women not assessed during consultation with adolescents. Homophobic remarks

relationship with the community, through which trust and mutual respect had been built.

Legitimacy was based on four interconnected pillars: continuity, closeness, reliability and acknowledgement. In Los Barrios and Chambil continuity was set on the fact that the same providers had been working (well) in the health care centre for many years. In Nueva Ciudad, continuity was sustained by the administrator of the health centre who remained in the service and disseminated the knowledge and commitment among the new comers.

Although continuity is important for achieving legitimacy, it would not be possible without closeness. Closeness generates trust, and this enables a service that could be sensitive to exist and flourish.

> Children are attended here, and they grow up knowing that there is an AFS here, so when they become adolescents they go to that office . . . it's like a chain. Even adolescents from other neighbourhoods come here, because maybe a schoolmate tells them that here they can meet a doctor who is cool and with whom it's easy to talk [. . .] Mothers are not afraid of their sons and daughters coming here, sometimes they come together and the mothers wait outside. (Statistics Department, Los Barrios).

In addition, reliability was gained by fulfilling their commitment to serve the community, i.e. by maintaining opening hours even in times of strikes. Ensuring the supply of drugs and resources was ensured on a continuous basis, which also strengthened the quality of

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the consultations, ensured coherence between the information provided and the services delivered and left users with the feeling that their needs were being comprehensively fulfilled. In Los Barrios, where contraceptives and educational materials were externally provided, this was easier to achieve.

Acknowledgement from the community was gained over the years, and encouraged service improvement. More recently, acknowledgement also came from sources outside the community, initially from NGOs followed by the MoH. Both types of recognition – from the community and at national/institutional levels – seem to have been cornerstone in legitimating the service, especially for the staff who had not been strongly involved in the implementation of AFS.

The transformative process

Properly addressing young people's health-related needs requires providers to challenge the dominant social norms and perceptions. In order to do so, services – and the people who work in them – need to undergo a process of change. This change was constructed as a transformative process, founded on five pillars: reflective learning; personal change; commitment; flexibility and non-conformist acknowledgement of limitations. The process of 'formación' pushed providers to problematise their preconceptions and personal experiences, and in that sense, it was found to be uncomfortable for many. The ones who truly engaged in reflective learning were able to see their daily encounters with young users from a different perspective, i.e. they were able to identify demands that they still had to learn how to address, and they were able to identify their own prejudices and to prevent them from interfering in consultations.

In all three cases, the providers expressed that changes to practices could not have happened without this process of personal change. Participants expressed how the process changed their attitudes towards issues of sexuality, confidentiality during consultations with minors, abortion, decision-making and autonomy. Not all providers engaged with such a process, and that meant that negotiation and rearrangements had to take place, in order to ensure that adolescents receive good quality of care.

> Changing mental schemas doesn't work for everybody; you can provide the tools and the knowledge, but the final decision remains on each provider. Because I think that in order to attend adolescents, we as adults have to address our own taboos beforehand. So, in this center after everybody received the training they had to decide whether they would engage in the AFS or not, nobody was forced. (Director Nueva Ciudad)

Commitment was considered as a requisite for engaging in delivering such services, and a force that pushed towards further engagement. Something that differentiated Los Barrios from the other two AFSs which were explored was that in Los Barrios, being committed to the health of young people did not require providers to sacrifice their time outside of their working hours. In the other services, implementing AFS required extra effort in terms of extra working hours or even money, as the AFSs were not fully institutionalised.

Flexibility was another important pillar of the transformative process. It refers to how the providers and the services being delivered were adapted in order to encourage young people to access them, e.g. in all the three services adolescents were allowed to attend consultations in groups to diminish embarrassment and could avoid reception and all the bureaucratic procedures if they just needed condoms.

Legitimacy pushed the service to maintain its quality standards and produced a sense of pride that motivated this effort towards improvement. The providers interviewed were proud of the service they provided; however, they were also critical: they recognised several issues that could be improved and were not conformist in this recognition, but tried to address them. However, many of these limitations were structural and difficult to surpass, i.e. the deficit of human resources, weak distribution systems to ensure continuous supplies of drugs or a lack of financial resources for developing promotional activities.

Integral approach to adolescents

The mechanism of 'an integral approach to adolescents,' was based on three main pillars: democratic and respectful relationships; approaches incorporated purposively and naturally; and the development of windows of opportunity.

Even if the three cases aimed to address young people's health care needs, the approaches to adolescents varied. At one end of the spectrum, Chambil's AFS favoured a risk-preventative approach to adolescents' health, while at the other end, Los Barrios placed adolescents at the core of the service and made every effort to address their health care needs in an integral way. Democratic and respectful relationships refer to the way in which providers interact with young service users. Adolescents were treated with respect, as autonomous agents, and the doctor put every effort into ensuring their right to confidentiality and privacy.

> Here, you can be confident on the doctor, you can be sure that whatever you say during the consultation stays there, that you can talk about anything with him. That's quality. (FGD Youth Organization Chambil)

This was even prioritised over the desires of the adults responsible for them, i.e. in Nueva Ciudad and Los Barrios when adolescents came with their parents, the

doctor asked the parent to stay in the waiting room until the consultation was over.

For a service to become relevant to adolescents' health-related needs, certain approaches needed to be integrated. According to the participants' views, a rights-based approach, a gender-based approach and an integral approach to adolescents' health are especially relevant. However, the extent to which these approaches were incorporated varied. Gender issues – i.e. exploring the possibility of gender-based violence, improving boys and young men access – were explicitly addressed in Los Barrios but hardly in the other two cases.

> There [in Los Barrios] you notice that there is something different. In this health center you really see adolescents. I was surprised to find boys there, and not because they were ill, but because they were looking for information or condoms. I mean, what surprised me was that it was always full with young men. (FGD Youth Organization Guayaquil)

Incorporating these approaches was not always smooth. Specifically, adopting a more open approach to adolescents' sexual activity may lead to divergent views and conflicts between providers, especially when new staff comes to the health centre.

> A strength [of AFS] is the autonomy that adolescents develop, the self-assurance they acquire during consultation. And a weakness, I don't like … because they are too young, I have seen boys who are 14, and they come here asking for condoms …, and they ask me, and I think they are too young, don't you think so? (Nurse, Los Barrios)

The three health centres did not limit their activities to delivering services in the unit; they took advantage of window opportunities for promoting health and the services they offer. All of them carried out outreach activities with neighbouring schools. Chambil and Nueva Ciudad had also managed to build a youth group connected to the health service, and that has enabled them to engage in peer-education activities.

In Los Barrios, windows of opportunity were created during consultations. In this AFS, the GP mastered the ability to introduce extra topics – such as development, sexuality, contraceptives, nutrition, drugs or violence – during consultations in a natural and non-intrusive way, which young users perceived as an opportunity to get to know which resources were available for when they might need them.

Discussion

The development of AFSs in the three cases explored was mediated by four mechanisms: grounded self-confidence in trying new things, legitimacy, a transformative process and an integral approach to adolescents. Several studies have shown that in order to be effective, training on adolescent health and AFS should be sufficiently long and intense, especially as the majority of undergraduate health programmes do not include such issues (11, 13, 22, 49). In the cases explored here, the process of 'formación' allowed health care providers to engage in creative initiatives and also gave them an opportunity to change their attitudes and behaviour to a more positive perception of adolescents. As participants pointed out, developing AFS involved challenging prevailing norms regarding youth, sexuality and autonomy, characterised by adult-centrism and a moralistic view of youth sexuality. Other studies have shown that such norms do not promote young people's health and well-being (2, 50).

Commitment was an important component of the transformative process, and one found in all three cases we explored. Other studies have also shown that the training process for implementing AFS requires a special commitment and that not all providers may be willing to engage in it (13, 51, 52). However, commitment cannot stand alone. When the commitment of the staff is not met with political will and a conducive structure, its sustainability can become jeopardised. In the two cases of Nueva Ciudad and Chambil, AFSs were mainly sustained by the voluntarism of providers who put in extra effort to engage in activities with adolescents. This says a lot regarding their motivation and interest levels, but questions the sustainability of such services in the long run.

Continuity is one of the pillars of legitimacy, and in the three cases it was strongly enhanced by the long-term relationship between the health providers (all or some) and the community. In Ecuador, as elsewhere, the continuity of staff in AFS is hindered by the high turnover rate and weak strategies for retaining health care workers, especially in rural areas (11). In the explored cases, the development of these mechanisms did not occurred in a vacuum, but was mediated by contextual circumstances. The close support provided by local or international NGOs played an important role: in the most consolidated case, Los Barrios, the fact that the community had a close relationship with the local NGO and the health care facility fostered legitimacy.

Other studies have shown that health care team learning is influenced by predisposing factors, enabling factors and reinforcing activities (53). In the three cases, pre-disposing factors for AFS integration include that the health teams were positive towards learning and innovating. They also had established good relationships with the community they were located in and were perceived as well-functioning. Enabling contextual factors that contributed to AFS integration were the training activities and close support provided by NGOs and that triggered the mechanisms of 'formación' previously described.

Non-governmental organisations' approach towards adolescents made a difference. In Los Barrios, a feminist NGO with close connections with the community aided the health care team in explicitly incorporating a gender

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approach and an adolescent-centred approach. This seemed to work better, in terms of the diversity of adolescents accessing the AFS and the diversity of consultations attended. However, this was not always smooth and at times newcomers perceived this approach as giving too much freedom to adolescents.

Reinforcing factors consisted of continuous support and training and the recognition and appreciation from the national level. However, despite AFSs' integration into service delivery at the health centre-level, their integration into Ecuador's health system overall seems weaker. Policies exist to address adolescent health, and the health system is supposed to offer comprehensive health care for adolescents; yet, financing remains weak, and it remains unclear how the integration is being carried out with regard to other critical functions of the health system, such as planning, monitoring and evaluation, and demand generation (15).

When interventions are linked to national policies and programmes, such as in our case, they evolve over time (35). This not only makes their analysis more complex but also highlights how contextual changes may affect the implementation of innovations. While in the beginning of the study, AFSs' integration seemed to evolve in a linear process where supportive national policies lead to increased openness towards their implementation, a closer examination of the three cases portrayed a more fluid situation. These three cases emerged in a changing socio-cultural scenario where youth and civil society movements were advocating (and sometimes successfully incorporating into national policies) young people's rights and bodily sovereignty, but their ideas and demands still met with strong opposition (18). The AFSs studied did not emerge as a result of enabling policies and supportive MoH leadership, but rather due to local willingness and locally based support. The fact that all three cases were quite isolated and marginalised, in national terms, diminished the possibility of encountering opposition from conservative forces in those provinces, such as the Catholic Church. In addition, the autonomy of the health care centre as well as the ineffectual leadership of the MoH when the implementation of the AFS began allowed creativity and experimentation.

Strong political will and supportive health system may not have been needed for AFSs to emerge, but seem crucial for their sustainability. When the study was conducted feminist and human rights advocates had entered decision-making positions in the MoH and were backing the efforts of local initiatives, such as the three cases studied. The experience of these local initiatives was being acknowledged and used, i.e. they were training other health providers and had participated in developing the New Guidelines. This support backed and motivated them to improve. However, as has mentioned above, it is unclear how such support, not adequately backed by funding and clear enabling structures (i.e. time and persons officially allocated for tasks related with AFSs) will ensure service sustainability.

The question of how to scale up this experience while relying on the resources of the MoH in Ecuador (which are fairly limited with regard to the adolescent health care programme) remains a challenge. Scaling up will also mean gaining attention at the national level, where traditional norms may give rise to opposition to some of the activities carried out in AFSs. The lack of clear definitions of what encompass an AFS also makes this task difficult. Currently, the web page of the MoH of Ecuador states the existence of 139 AFSs (54), but is unclear who and under which criteria determines that a health centre becomes an AFS.

In Nueva Ciudad and Chambil, adolescents reached the health care facility and were treated for different conditions; however, integrality was not achieved, as the adolescents received different care depending on their pregnancy and/or civil status. The arrangements in Los Barrios, where there were specific times dedicated to adolescents and one GP was in charge of all of their consultations, seemed the most successful and arguably the most feasible in small health care facilities with limited staff. However, relying on one provider to be knowledgeable and willing to face all kinds of consultations with adolescents might be unrealistic in many settings.

The literature on AFSs stresses the need to consider gender issues, but practical examples of how to operationalise this in daily practice remain scarce (27, 55). The case of Los Barrios illuminates how a gender-based approach can be translated into an AFS, namely bearing in mind and assessing the possibility that an adolescent may be suffering from gender-based violence or sexual violence was always considered during the consultation, developing referral networks with social and legal services, and finding ways to promote young men's access to health information and services.

In sum, two important findings emerge from the analysis of the cases. First, mechanisms were not generated solely within the health care team, but through the interaction between the health care team, the community and the NGO/international agency that supported the innovation. Second, the interaction between the national-institutional level and the local level was less linear than we envisioned in the start. The integration of AFS occurred with little interference of the national level, and despite the barriers posed by the structure of Ecuador's national health system, e.g. non-existent reporting systems for adolescents when these initiatives existed, difficulties in getting free contraceptives without a national identification card, biomedicalised guidelines. Later, when these experiences were more consolidated, an increased openness of key persons within the MoH

enabled these local experiences to contribute to the development of New National Guidelines and the diffusion of their experience to other health facilities. In a feedback loop, this recognition also reinforced the AFSs delivered in these three cases.

Methodological considerations

Using a realist evaluation approach helped us to focus on ascertaining the mechanisms behind the interventions, which belong to a more abstract level and consequently may be useful beyond the cases explored in this paper. During the process of sharing the preliminary results with AFS providers, the concept of mechanisms was found as particularly useful. The emerging mechanisms were used by the providers as tools against to self-evaluate their services and plan interventions that could contribute to strengthen those mechanisms in the particular circumstances of their health services. The usefulness of mechanisms to bridge the gap between theory generation and translation into practice has also been pointed out by other authors before (20).

This study was not planned as a realist evaluation from the start. However, during preliminary contact with health authorities and through discussion between the co-authors, the usefulness of adopting a realist evaluation approach emerged. The rationale for this choice was based on several factors: (i) the complexity of the intervention, (ii) the authors' interest in exploring the connections between context, intervention and outcomes, (iii) the authors' interest in exploring in-depth the core elements of integrating (or not) innovations, which we considered in line with the realist evaluation concept of mechanisms and (iv) the importance of delivering results that could be useful for policy makers.

We do not claim to have conducted a realist evaluation in the classically structured way presented in other studies, which focus on refining a mid-range theory (31, 32). In our case, the focus was on ascertaining the mechanisms that could be useful for policymakers involved in the implementation of AFS in Ecuador and elsewhere.

The duration of observations was limited to 1 week per case, which means the health care team could have behaved more 'desirably' than as usual. Social desirability bias could have occurred during the interviews and focus groups discussions as well, leading to results that portrayed a more idealised situation than the ordinary day-to-day activities in the cases.

The study focuses on service delivery aspects in the three cases, and did not explore in depth how integration occurs in other components of the health system that are key for sustaining AFS, e.g. national budget allocated. From the data analysis, the actual integration of AFSs within the health system beyond the studied cases seemed weak and an important factor for the cases' success was the voluntarism of the three health care teams, despite the lack of structural support of the health system.

A number of challenges were faced during the application of the realist evaluation approach in this study. First, conducting retrospective realist evaluations has been described as problematic because of recall bias (32). In our case, recall bias may have affected our results, as we were ascertaining information regarding a long period of time, and one during which the local and national contexts had changed. Moreover, in our study, interventions were not straightforwardly defined beforehand in terms of components and expected outcomes, but rather these evolved during the implementation process. Other realist evaluations have mainly been carried out using well-defined interventions and performed during a limited period. However, we think that our study reflects the complexities behind the development of interventions in settings with limited resources, especially when addressing issues (such as the implementation of AFS) where there may not be clear-cut guidelines. This complexity and evolving capacity of long interventions based on policies have also been pointed out by other authors using realist evaluation (35).

Second, the outcomes were defined by the authors, and consequently the selection of the 'best case' relied on them. It could be argued that there may be other, better criteria, but the authors developed their criteria based on the national policies and programmes, which include, for instance, a focus on gender issues.

Finally, the boundaries between context, mechanisms and outcomes could be perceived as clear in theory, but they become blurred in practice. For example, in our study, having a well-functioning AFS was both an outcome (at the local level) and a mechanism for further advancement in terms of the policies and programmes that sustain AFS (at the national level).

Conclusion

This paper has identified the mechanisms that might lead AFS in Ecuador to achieve the goal of providing integral care for adolescents. A realist evaluation approach was used in order to unravel these mechanisms. This research has highlighted grounded self-confidence, legitimacy, a transformative process and an integral approach to adolescents as key features for AFS success. Along this process, contextual factors at different levels have been considered. The MoH of Ecuador, based on the New Guidelines for Comprehensive Care of Adolescent Health, has started the scaling up of AFS nationwide. Our research points towards the need to recognise and incorporate these mechanisms as part of the implementation strategy from the very beginning of the process. Otherwise, we fear the success of scaling up the AFS will be limited.

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Although contextually limited to Ecuador, we believe that many of the mechanisms and good practices in these AFS may be relevant to the Latin American setting and elsewhere. Further research will focus on identifying generic patterns of mechanisms among the AFS and the refinement of a programme theory in which mechanisms can affect specific outcomes.

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References

1. McIntyre P. Adolescent friendly health services – an agenda for change. Geneva: World Health Organization; 2002.
2. Bearinger LH, Sieving RE, Ferguson J, Sharma V. Global perspectives on the sexual and reproductive health of adolescents: patterns, prevention, and potential. Lancet 2007; 369: 1220–31.
3. Braeken D, Otoo-Oyortey N, Serour G. Access to sexual and reproductive health care: adolescents and young people. Int J Gynaecol Obstet 2007; 98: 172–4.
4. Gogna M, Binstock G, Fernandez S, Ibarlucia I, Zamberlin N. Adolescent pregnancy in Argentina: evidence-based recommendations for public policies. Reprod Health Matters 2008; 16: 192–201.
5. Meuwissen LE, Gorter AC, Knottnerus AJ. Impact of accessible sexual and reproductive health care on poor and underserved adolescents in Managua, Nicaragua: a quasi-experimental intervention study. J Adolesc Health 2006; 38: 56.
6. Schutt-Aine J, Maddaleno M. Sexual health and development of adolescents and youth in the Americas: program and policy implications. Washington: Pan American Health Organization; 2003.
7. Speizer IS, Magnani RJ, Colvin CE. The effectiveness of adolescent reproductive health interventions in developing countries: a review of the evidence. J Adolesc Health 2003; 33: 324–48.
8. UNAIDS Inter-agency Task Team on Young People. Preventing HIV/AIDS in young people: a systematic review of the evidence from developing countries. Geneva: World Health Organization; 2006.
9. Dickey SB, Deatrick J. Autonomy and decision making for health promotion in adolescence. Pediatr Nurs 2000; 26: 461–7.
10. Metcalfe T. Sexual health: meeting adolescents' needs. Nurs Stand 2004; 18: 40–3.
11. Tylee A, Haller D, Graham T, Churchill R, Sanci L. Youth-friendly primary-care services: how are we doing and what more needs to be done? Lancet 2007; 369: 1565–73.
12. Sundby J. Young people's sexual and reproductive health rights. Best Pract Res Clin Obstet Gynaecol 2006; 20: 355–68.
13. Baltag V, Mathieson A. Youth-friendly health policies and services in the European region. Copenhagen: World Health Organization; 2010.
14. Brindis CD, Loo VS, Adler NE, Bolan GA, Wasserheit JN. Service integration and teen friendliness in practice: a program assessment of sexual and reproductive health services for adolescents. J Adolesc Health 2005; 37: 155–62.
15. Atun R, de Jongh T, Secci F, Ohiri K, Adeyi O. Integration of targeted health interventions into health systems: a conceptual framework for analysis. Health Policy Plan 2010; 25: 104–11.
16. Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organizations: systematic review and recommendations. Milbank Q 2004; 82: 581–629.
17. Ferlie E, Fitzgerald L, Wood M, Hawkins C. The nonspread of innovations: the mediating role of professionals. Acad Manage J 2005; 48: 117–34.
18. Goicolea I. Adolescent pregnancies in the Amazon Basin of Ecuador: a rights and gender approach to adolescents' sexual and reproductive health. Glob Health Action 2010; 3. doi: 10.3402/gha.v3i0.5280. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2893010/pdf/GHA-3-5280.pdf [cited 15 December 2011].
19. Olson CA, Tooman TR, Alvarado CJ. Knowledge systems, health care teams, and clinical practice: a study of successful change. Adv Health Sci Educ Theory Pract 2010; 15: 491–516.
20. Anderson PJJ, Blatt R, Christianson MK, Grant AM, Marquis C, Neuman EJ, et al. Understanding mechanisms in organizational research: reflections from a collective journey. J Manage Inq 2005; 15: 102–13.
21. Comite Subregional Andino para la Prevencion del Embarazo en Adolescentes [Subregional Andean Committee for Adolescent Pregnancy Prevention]. Situación del Embarazo en la Adolescencia en la Subregion Andina [Situation of Adolescent Pregnancy in the Andean Subregion]. Lima: Organismo Andino de Salud; 2009.
22. UNFPA. Políticas públicas de juventud y derechos reproductivos: limitaciones, oportunidades y desafíos en América Latina y el Caribe [Youth public policies and sexual and reproductive rights: limitations and opportunities and challenges in Latin America and the Caribbean]. New York: UNFPA; 2005.
23. Nirenberg O, Infante F, Sedano Acosta F, West B. Evaluación externa: Plan de acción en salud y desarrollo de adolescentes y jóvenes en las Américas. Final report [External evaluation: action plan on health and development of adolescents and young people in the Americas. Final report]. Washington, DC: Pan American Health Organization; 2002.
24. MoH Ecuador. Plan andino de prevención de embarazo en adolescentes [Andean plan for adolescent pregnancy prevention]. Quito (Ecuador): Ministry of Health; 2007.
25. MoH Ecuador. Plan nacional de prevención de embarazo en adolescentes [National plan for adolescent pregnancy prevention] Quito (Ecuador): Ministry of Health; 2007.
26. Congreso Nacional Ecuador. Código de la Niñez y Adolescencia [Children and Adolescents Code]. Quito (Ecuador): Congreso Nacional Ecuador; 2003.
27. Chen H. Theory-driven evaluations. Newbury Park, CA: Sage publications; 1990.
28. Marchal B, Dedzo M, Kegels G. A realist evaluation of the management of a well-performing regional hospital in Ghana. BMC Health Serv Res 2010; 10: 24.

29. Maluka S, Kamuzora P, SanSebastian M, Byskov J, Ndawi B, Olsen OE, et al. Implementing accountability for reasonableness framework at district level in Tanzania: a realist evaluation. Implementat Sci 2011; 6. Available from: http://www.biomedcentral.com/content/pdf/1748-5908-6-11.pdf [cited 2 February 2012].
30. Marchal B, Dedzo M, Kegels G. Turning around an ailing district hospital: a realist evaluation of strategic changes at Ho Municipal Hospital (Ghana). BMC Public Health 2010; 10: 787. Available from: http://www.biomedcentral.com/1472-6963/10/24 [cited 2 February 2012].
31. Marchal B. Why do some hospitals perform better than others? A realist evaluation of the role of health workforce management in well-performing health care organisations. A study of 4 hospitals in Ghana. Brussel: Vrije Universiteit Brussel; 2011.
32. Van Belle SB, Marchal B, Dubourg D, Kegels G. How to develop a theory-driven evaluation design? Lessons learned from an adolescent sexual and reproductive health programme in West Africa. BMC Public Health 2010; 10: 741. Available from: http://www.biomedcentral.com/1471-2458/10/787 [cited 2 February 2012].
33. Prashanth NS, Marchal B, Hoeree T, Devadasan N, Macq J, Kegels G, et al. How does capacity building of health managers work? A realist evaluation study protocol. BMJ Open 2012; 2: e000882. Available from: http://bmjopen.bmj.com/content/2/2/e000882.short [cited 1 June 2012].
34. Marchal B, Van Belle SB, Van Olmen J, Hoeree T, Kegels G. Is realist evaluation keeping its promise. A review of published empirical studies in the field of health systems research. Evaluation 2012; 18: 192–212.
35. Manzano Santaella A. A realistic evaluation of fines for hospital discharges. Incorporating the history of programme evaluations in the analysis. Evaluation 2011; 17: 21–36.
36. Pawson R, Manzano Santaella A. A realist diagnostic workshop. Evaluation 2012; 18: 176–91.
37. Blaise P, Kegels G. A realistic approach to the evaluation of the quality management movement in health care systems: a comparison between European and African contexts based on Mintzberg's organizational models. Int J Health Plann Manage 2004; 19: 337–64.
38. Byng R, Norman I, Redfern S. Using realistic evaluation to evaluate a practice/level intervention to improve primary healthcare for patients with long/term mental illness. Evaluation 2005; 11: 69–93.
39. Pommier J, Guevel MR, Jourdan D. Evaluation of health promotion in schools: a realistic evaluation approach using mixed methods. BMC Public Health 2010; 10: 43. Available from: http://www.biomedcentral.com/1471-2458/10/43 [cited 2 February 2012].
40. Astbury B, Leeuw FL. Unpacking black boxes: mechanisms and theory building in evaluation. Am J Eval 2010; 31: 363–81.
41. Evans D, Killoran A. Tackling health inequalities through partnership working: lessons from a realistic evaluation. Crit Public Health 2000; 10: 125–40.
42. Tolson D, McIntosh J, Loftus L, Cormie P. Developing a managed clinical network in palliative care: a realistic evaluation. Int J Nurs Stud 2007; 44: 183–95.
43. MoH Ecuador. Situacion actual de las unidades de atencion diferenciada para adolescentes en el Ecuador. Sistematizacion de experiencias en 10 provincias [Actual situation of differentiated services for adolescents in Ecuador. Compilation of experiences in 10 provinces]. Quito (Ecuador): Ministry of Health; 2007.
44. MoH Ecuador. Normas y Procedimientos para la Atención Integral de Salud a Adolescentes [Guidelines for Integral Care for Adolescents]. Quito (Ecuador): Ministry of Health; 2009.
45. CEPAM Guayaquil, MoH Ecuador. Sistematización de dos experiencias de atención en salud sexual y reproductiva a adolescentes y jóvenes [Compilation of two experiences of sexual and reproductive health care for adolescents and young people]. Guayaquil: CEPAM; 2005.
46. MoH Ecuador. Politica Nacional de Salud y Derechos Sexuales y Reproductivos [National Policy for Sexual and Reproductive Rights and Health]. Quito: MoH Ecuador; 2005.
47. Maldonado Posso V. Aborto, política y religión en el Ecuador: Un análisis filosófico en la coyuntura de la Asamblea Nacional Constituyente 2008 [Abortion, policy and religion in Ecuador: a philosophical analysis during the National Constitutional Assembly 2008]. Quito: FLACSO Ecuador; 2008.
48. Gilman A. Juventud, Democracia y Participación Ciudadana en el Ecuador [Youth, democracy and civic participation in Ecuador]. Revista Latinoamericana de Ciencias Sociales. Niñez y Juventud 2010; 8: 329–45.
49. Larke N, Cleophas-Mazige B, Plummer ML, Obasi AI, Rwakatare M, Todd J, et al. Impact of the MEMA kwa Vijana adolescent sexual and reproductive health interventions on use of health services by young people in rural Mwanza, Tanzania: results of a cluster randomized trial. J Adolesc Health 2010; 47: 512–22.
50. Goicolea I, Wulff M, Sebastian MS, Ohman A. Adolescent pregnancies and girls' sexual and reproductive rights in the Amazon Basin of Ecuador: an analysis of providers' and policy makers' discourses. BMC Int Health Hum Rights 2010; 10: 12. Available from: http://www.biomedcentral.com/1472-698X/10/12/ [cited 12 February 2011].
51. Instituto de Educación y Salud-IES, ed. Acortando distancias entre proveedores de salud y adolescents y jóvenes. Servicios de salud amigables en Bolivia, Ecuador y Perú [Shortening distances between health providers and adolescents and young people. Friendly health services in Bolivia, Ecuador and Peru]. Lima (Peru): Instituto de Educación y Salud-IES; 2003.
52. Shaw D. Access to sexual and reproductive health for young people: bridging the disconnect between rights and reality. Int J Gynaecol Obstet 2009; 106: 132–6.
53. Barnsley J, Lemieux-Charles L, McKinney MM. Integrating learning into integrated delivery systems. Health Care Manage Rev 1998; 23: 18–28.
54. MoH Ecuador. Programa de Salud de Adolescentes [Adolescent health program]; 2012. Available from: http://www.msp.gob.ec/index.php/programas/41-adolescentes [cited 10 June 2012].
55. Pawson R, Tilley N. Realistic evaluation. London: SAGE Publications; 1997.

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