

# Health and education provider collaboration to deliver adolescent sexual and reproductive health in Sri Lanka

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## Abstract

The complex nature of adolescent sexual and reproductive health (ASRH) determinants demands a multidisciplinary and intersectoral approach. Collaborative approaches are central to the delivery of quality health care and services but the focus is often health sector specific. Few research studies have explored the views and experiences of health workers and teachers and examined how ASRH services and information are provided by professionals across the education and health sector. Sri Lanka has made considerable progress towards addressing the Millennium Development Goals (MDG), however, there are still gaps reflected in adolescent health, social indicators, and the delivery of services. Enhancing the collective efforts of teachers and health professionals may help to improve the quality and use of services and ASRH knowledge. This study aimed to identify the experiences, needs, knowledge, attitudes and practices of primary healthcare and education professionals and the strategies that best support them to deliver sexual and reproductive health information, education, counseling and clinical services to Sri Lankan adolescents. Qualitative and survey data were gathered from 65 nurses, midwives, public health inspectors, medical officers, teachers, counselors and principals in the district of Kalutara. Knowledge, attitudes and service gaps were identified in relation to contraception and policy guiding practice. Participants highlighted concerns with confidence, roles and training that were said to affect student access to appropriate health services. ASRH Collaborative practices were noted across the sectors and strategies suggested for improvement. Findings suggest that inter-professional education and training may provide opportunities to enhance collaboration supported and guided by appropriate policy, supervision and job descriptions (i.e. roles and responsibilities).

**Keywords:** Adolescence, Reproductive health, School health, collaboration, Sri Lanka.

## Introduction

Eighty eight per cent of the world's 1.2 billion adolescents live in developing countries and their sexual and reproductive health (ASRH) outcomes are disproportionately poorer than other groups.<sup>1</sup> The complex nature of adolescent health determinants demands a multidisciplinary and intersectoral collaborative approach beyond the health sector.<sup>2</sup> Building and supporting collaboration is therefore necessary across health, education, media and social services to realize large, sustained impacts on ASRH outcomes.<sup>3</sup> Despite this, little is known about how collaboration occurs between professionals across sectors and how these professionals can be best supported to improve adolescent health.

### *Workforce collaboration for health*

Successful collaborations have been characterized by clear communication, true dialogue, active listening, an awareness, respect and appreciation for differences, and an ability to negotiate options.<sup>4,5</sup> These findings however have been derived from research that focuses on collaboration with health professionals from different health disciplines rather than health professionals collaborating

## Practice Points

- The complex nature of ASRH determinants demands a multidisciplinary and intersectoral approach.
- Collaborative practice between health and education professionals was occurring albeit on an ad-hoc basis in Sri Lanka.
- Participants highlighted concerns with confidence, roles and training that were said to affect student access to appropriate health services.
- Health workers expressed a lack of confidence in teachers, and male teachers questioned female teacher's abilities to provide ASRH information to students.
- Effective inter-professional education and training of health workers and teachers including role clarification may enhance collaborative practice.

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with non-health professionals from other sectors. There is evidence available that demonstrates that collaborative partnerships across sectors can contribute to positive intermediate changes in health knowledge, attitudes, behaviour, and in the environment through new policies, practices and services.<sup>6</sup> However, this research has been concentrated at the community<sup>7</sup>, agency<sup>8</sup>, programme<sup>9</sup> and population level<sup>10</sup> and on health outcomes<sup>11</sup> rather than on the practices and achievements of the intersectoral workforce involved in health. Identifying the experiences, needs, knowledge, attitudes, skills and practices that limit or facilitate a professional's ability to collaborate within health fields such as ASRH will provide insight into how this workforce can be better supported. Collaboration has been found to offer health workers supervisory support<sup>12, 13</sup> and learning opportunities<sup>14</sup> but investigations must move beyond a focus on the health sector.

#### *ASRH programs and workforce collaboration across the health and education sectors*

ASRH, as per the International Conference on Population and Development definition<sup>15</sup>, involves engaging with adolescents to provide information and education on human reproductive systems; sexually transmitted infections (STIs), including HIV/AIDs and how to prevent them; contraception and family planning, sexual health and human relationships; as well as the treatment and management of STIs and the provision of contraceptives, counseling, pregnancy care and termination. This definition highlights ASRH program components that involve medical, nursing and psychological services and health education and advocacy requiring professionals with a range of expertise.

ASRH program approaches that consider workforce, as well as service delivery issues across the health and education sectors have been found to offer a higher likelihood of success.<sup>16</sup> Bond<sup>17</sup> identifies a number of necessary workforce inputs and processes including appropriate selection and recruitment criteria, pre- and in-service training, supervisory mechanisms and appropriate incentives for facilitators, teachers, counselors, health workers and peer educators. However, health and education professionals usually receive separate, discipline specific training<sup>18-20</sup> despite being required to collaborate to deliver services.

#### *The Sri Lanka context*

Sri Lanka has made considerable progress towards reducing maternal mortality and providing access to reproductive health and primary education (MDG 5 and 2), however gaps still exist. Only 44.7% of currently married women of 15-19 years age range reported using modern contraceptive methods and although high numbers of 15-19 years mentioned having heard about HIV/AIDS. However, there are still considerable knowledge gaps concerning the use of condoms for prevention<sup>21</sup> and the signs and symptoms of STIs.<sup>22</sup> Nearly 10% of early adolescents and 14% of mid and late adolescents admitted to have been sexually abused.<sup>23</sup> Socio-cultural and legal factors in the country also strongly affect the

open and free discussion of issues of sexuality.<sup>24</sup> Abortion is illegal, unsafe and rising with one fifth of abortions occurring among adolescents.<sup>25</sup>

Universal health coverage is delivered by a multi-disciplinary team who provide free access to health care for adolescents at primary care level. A Medical Officer of Health is a doctor in charge of each Medical Office of Health (MOH) area which has a community health field staff to carry out the promotive and preventive services. The role of the public health nursing sister in the team is to supervise midwives and provides services from the MOH clinic. The public health midwife is the 'front line' health worker providing domiciliary, promotive and preventative maternal child health and family planning services to a well-defined area consisting of a population ranging from 2000-4000. In schools, public health inspectors (PHI) undertake sanitation surveys, and contribute to broader health promotion activities.<sup>26</sup>

Teachers in secondary schools are responsible for teaching three subjects in the school curriculum that offer contents and competencies related to ASRH. Some schools have teacher counselors appointed by the principals. The National Institute of Education provides teacher training but does not offer formal courses in counseling or ASRH.

This paper reports the results of a study designed to identify the experiences, needs, knowledge, attitudes and practices of primary healthcare and education providers and strategies that could best support them to collaborate to deliver quality sexual and reproductive clinical, counseling and health education services to Sri Lankan adolescents. This will contribute a much needed evidence-base to inform the development of policy directions and workforce practice across the health and education sectors in ASRH.

## **Materials and methods**

For this study, both qualitative and quantitative methods were adopted to answer exploratory and confirmatory questions and to provide complimentary data using guided focus group discussions, interviews and a short structured survey questionnaire.

#### *Research site*

The Kalutara district in the Western province was selected for convenience. Kalutara is 70 kilometres from Colombo with a population of 1 million. Nearly 30% of the population is under 18 years with the majority (86%) residing in rural in-land areas.<sup>27</sup> The coastal areas of the district are urbanized and economically developed and the inland areas are dominated by the plantation estate sector and the garment industry.

#### *Study participants*

Health workers included medical officers, public health nursing sisters, primary health midwives, and public health inspectors. Education personnel included primary and secondary school teachers, teacher counselors and school principals. Information flyers about the study

were distributed through the eight MOHs and the zonal education office. Those interested in the study were invited to attend an advertised information session or send a short text message to a research officer who arranged meetings to provide further information and gain consent.

#### *Interviews and focus group discussions*

Focus group discussions (FGDs) of approximately 1 hour duration were undertaken with each professional group. Separate FGDs were conducted for male and female teachers by facilitators of the same gender and were held at the zonal education office. Key informant interviews (KIIs) were conducted for school principals and teacher counselors as their schedules made it more difficult to bring them together in a group. FGDs for each group of health professional were held at the Kalutara MOH. A semi-structured interview guide was developed in English and Sinhalese. FGDs and KIIs were conducted by the second author (KW) and a research assistant. Discussions were recorded verbatim on audio tape and transcribed into Sinhalese and into English and then back translated into English. The questions included: 'What sexual and reproductive health information and services do you provide to adolescents and what have some of your experiences been?', 'What are the issues involved and what are the barriers and constraints to this service provision?', 'What could help to better support your efforts in the workplace?', 'What do you think about the roles and knowledge of other providers in this area?', 'Do you work with teachers/health workers, if so how do you work together?' 'Do you have some suggestions for improving the ways you work with teachers/health providers?'

#### *ASRH knowledge attitudes and practice surveys*

A questionnaire for health workers and teachers was developed adapted from existing instruments that have been extensively field tested in low and middle income countries.<sup>28</sup> Relevant items from these surveys were extracted, appropriately tailored to the Sri Lankan context and included under the categories of: ASRH health service and policy knowledge; condoms (knowledge, attitudes); attitudes to the provision of ASRH care and information, care and information provided by teachers/health workers including referral, and provision of teachers/health workers training. The surveys were designed to elicit information concerning three areas that are part of the study's aim i.e. the knowledge, attitudes and practices of primary healthcare and education providers. The two surveys were translated into Sinhala and adapted after pilot tests. The surveys were completed by all 65 participants after the focus group discussions. These were collected by a research assistant and entered into the statistical database SPSS. Frequency measures were obtained.

#### *Data analysis*

An inductive category development approach to content analysis<sup>29</sup> was used to analyze the qualitative data. Codes emerged during several readings of the transcripts and labels were assigned that were based upon

the text and revised accordingly as new data was analyzed. Codes were then grouped into categories or themes and concept maps were drawn up to extrapolate links and patterns across all categories and sub-categories under each theme. The rigor of the analysis process was enhanced through ongoing discussion between the researchers, who agreed upon themes and categories. The first (AJD) and third author (EB) independently coded the units of meaning from all transcripts and consensus was reached through negotiation. The second author (KW) undertook a descriptive statistical analysis of all questions from the KAP surveys to establish frequency of responses and results were shared and discussed with the first author. Chi squared tests were performed between health worker and teacher responses but no significant relationships were found.

#### *Ethical Review*

Ethical clearance was gained from the Human Ethics Committee at the University of New South Wales, Australia and the University of Sri Jayewardenepura, Sri Lanka.

## Results

Sixty five providers consented and participated in this study. Their profession, sex, age range and religion are outlined at Table 1.

The findings from the focus group discussion and interviews are discussed according to the key themes that emerged from the analysis. These themes are: ASRH knowledge, attitudes and work practices; provider roles and performance; educational and training; the working environment and collaboration. The results from the survey are discussed under the pertinent ASRH knowledge, attitudes and work practices and education and training sections.

#### *ASRH Knowledge, attitudes and work practice*

All providers correctly answered that condoms can help to protect oneself against STIs and HIV. Sixty-three percent of health providers and 81% of educational providers were not aware of any institutional or national policies or guidelines to guide their ASRH practice. Only 4 MOs mentioned the new minimum ASRH service delivery package developed by the Sri Lankan Ministry of Health<sup>30</sup> while 6 PHNS, 1 midwife and 3 PHIs noted the national HIV/AIDS strategy<sup>31</sup> and Maternal Child Health Policy.<sup>32</sup> Forty percent of health workers and 26% of education providers (4 teachers and 3 principals) reported experiencing some level of discomfort discussing sexual and reproductive health issues with adolescents. Discomfort for health workers was high among PHIs – 6 of the 7 surveyed indicated discomfort: others who mentioned discomfort were PHNS (5), midwives (2) and MOs (2). This discomfort was also reported in the focus group discussions and in relation to the provision of contraception.

Providers were also asked about current practice in terms of the care, the information they gave to adolescents and what instances they referred young people.

**Table 1:** Characteristics of the participants

Characteristics	Education providers (n-27)	Health Providers (n-38)
<i>Gender</i>		
Male	13	10
Female	14	28
<i>Age</i>		
<35yrs	7	5
35-45 yrs	10	16
>46 yrs	10	17
<i>Religion</i>		
Buddhist	21	34
Catholic	2	2
Muslim	1	1
Hindu	3	1
<i>Type of providers</i>		
Female teachers	7	-
Male teachers	7	-
Teacher-counselors	7	-
School Principals	6	-
Public health inspectors	-	7
Public health midwives	-	13
Public health nursing sister	-	12
Medical officers	-	6

Seventy-one percent of health workers surveyed said that if asked by an adolescent for contraception they would advise the adolescent to abstain from sexual activity or wait until marriage (2 MOs, 11 PHNS, 9 midwives and 5 PHIs), 21% said they would ask the client what type of methods prefers and prescribe accordingly (5 MOs, 2 midwives, 1 PHNS), and 8% of the health workers were unsure. No teachers reported providing information to students on contraceptives while others stated that they discussed anatomy and physiology of male and female reproductive systems (25%), sexuality, gender and norms (12%), HIV/AIDS and sexually transmitted diseases (25%), and human relationships (38%).

Health providers indicated that they refer adolescents for counseling (40%) and for diagnosis and treatment for STIs (30%). When asked what action they took when faced with an ASRH issue at school, 21% of education providers responded 'don't know', 31% felt able to deal with the situation themselves by offering counseling to the student and 48% said they would refer to counseling at another agency.

The KIIs and FGDs revealed provider perceptions about their colleague's levels of knowledge, qualifications and abilities. Several male teachers expressed doubts regarding the ability of female colleagues to teach sex education: "*Students tend to listen more if it is a male teacher; a male teacher has that ability to control the class*". Another male teacher commented: "*Female teachers don't provide details mostly because they don't want to face embarrassment or ridicule from student*".

Despite agreeing that schools were a useful place to deliver sexual education, health providers questioned the ability of teachers to provide accurate information and carry out counseling. A medical officer commented on teachers' negative attitudes and limited knowledge as well as hindering his efforts to deliver safe sex messages: "*Teachers restrict doing these by saying, don't say these to students, don't speak on these, this is too much for students. But this is not coming from the students. That is a big obstacle*".

Some male teachers did not feel that providing SRH knowledge to adolescents was appropriate, rather they believed it served to encourage students to engage in inappropriate behavior that would put them at risk and bring shame: "*But after we have provided it students will use it for a different purpose*". "*We may run the risk of introducing them to dangerous and destructive activities*".

#### *Provider roles and performance*

Both health and education providers described a range of health promotion and prevention roles including counseling while health workers discussed curative aspects in relation to STIs. Participants highlighted concerns with roles and duties that were said to affect their ability to undertake certain tasks. ASRH related tasks such as follow up of youth after consultations were reportedly not included in job descriptions and some health providers felt that they were not able to carry out such work because other targets had to be reached. A public health midwife mentioned: "*We send a summarized report on our daily work. I think there is no place even in that to mention on this....So, generally we must*

*focus on our compulsory tasks and not address adolescent issues. We may neglect this area because we might not be able to achieve our targets in the evaluation at the end of the month”.*

This situation was related to problems with assessing provider performance particularly in relation to counseling as indicators were not appropriate. A public health inspector reported: *“There is also a problem regarding the datum for measuring, because when we provide counseling there will be a qualitative development but quantitatively it seems very small”.*

Health workers were not clear about their roles in schools and felt teachers called upon them to deliver ASRH education due to limited skills. However, some health workers while happy to undertake this saw it as an additional task that was not always recognized in their workload. A public health nurse said: *“I think we have to be given the opportunity to allocate time for these tasks by reducing some of the other work”.* Staff felt their workloads were already large, however many teacher counselors reported that they received good supervision and support from superiors. High staff turnover was noted in teacher counselor roles, as well as a shortage of counselors in rural areas.

Providers also reported a lack of clarity in job descriptions leading to role confusion. Some teacher counselors complained that teachers tried to take on the role of counselor without the necessary specialized training. A principal mentioned: *“It is necessary to make all the teachers aware about their duty and responsibility in relation to counseling so that students know where to go”.* Dual teacher and counseling roles were seen as problematic. Participants noted that this not only affected the time teachers were able to dedicate to their counseling role, but that students perceived this to affect confidentiality and as a result were more reticent to confide in them. One teacher highlighted: *“There is a privacy problem. How do students face the teacher after sharing his/her problem? There is a possibility that they may share this information with another party; I think it is better to give that responsibility to an outside person, such as health professional”.*

#### *Education and training*

Most providers felt that existing pre and in-service education and training in ASRH was unsatisfactory particularly in relation to counseling. One Public Health nurse reported: *“But we haven’t done a course specifically related to providing counseling for youth on reproductive health. This is a big gap”.* Many teachers agreed in the FGD that ASRH education should be provided by skilled and experienced teachers but noted gaps in available counseling skills *“At least 75% of the schools need well-trained counselors. It has not happened yet”.*

Results of the KAP survey indicated that 55% of health providers had not received reproductive health training in over 10 years. When teachers were asked about the ASRH training, over 55% didn’t know, over 30% said

they had no basic ASRH training and less than 15% had stated that they had received the training in the last 3-5 years.

#### *The working environment*

A recurring theme among providers was a reported lack of funding, resulting in inadequate facilities such as counseling rooms and resources for awareness programs. Providers requested up-to-date resources for health education and teachers noted that resources developed in mostly short term ASRH programs came without guidance and they were unsure how to use them. Teachers and health workers reported that parents could sometimes pose great barriers to the delivery of ASRH information, care and services. One PHN highlighted: *“We have received death threats because we provided information and help. People have come to my home even at 11 in the night”.* Involving parents was noted as a way forward. Other challenges in the workplace included adolescent shyness and difficulty generating demand for services.

Despite this providers were motivated to provide ASRH information and services and some felt supported by their supervisors to do so. One PHI said: *“We always try to contribute to solving problems in society whether or not it is included to our job”.* While a teacher reported: *“It makes me happy because I know how many students really appreciate this information and I receive the maximum support from the principal”.*

#### *Collaboration across the sectors*

Examples of collaboration were given within health, education and across both sectors, as well as across other state and non-state sectors. In schools health professionals were often invited to give talks. One School Principal mentioned: *“We invite doctors and conduct seminars, lectures on the sexual and reproductive health”.* Health providers involved teachers and other workers in their health promotion programs: *“We conduct health programs for adolescents with them. We associate with the school teachers, the social service officer and probation officers”.*

Providers felt that formalized relationships between professionals in different sectors were needed to clarify team and individual roles and responsibilities. All participants discussed the need for intersector alignment and collaboration in ASRH through development of appropriate policy and guidelines. Such policy and guidelines would improve communication to design and implement collaborative programs: *“Education ministry and health ministry people have to get together and must take a good policy decision. These two sectors have to get together to do this in a better way”.* A single service point at community level to deliver ASRH services and information was regarded as useful to direct all referrals, which would help all providers to build relationships with youth and other agencies: *“A centre approach might help to bring professionals together but local youth need to be there as well, as resource people who need training.”*

## Discussion

### *Knowledge, skills and attitudes*

This study showed that despite high levels of knowledge among health providers, particularly midwives and PHIs who had most contact with adolescents at community level providers were uncomfortable discussing contraception. They were also reticent to provide information about how to access modern contraception methods and instead many recommended abstinence. This, along with teacher's reports of limited dialogue with young people regarding contraception suggests that adolescents may receive limited information about contraception from health and education providers. The lack of both teacher and health worker provision of information and advice concerning contraception identified in our study has also been noted among nurses in South Africa with negative consequences.<sup>22</sup> Nurses were found to be unwilling to acknowledge adolescents' experiences as contraceptive users and scolded teenage girls instead for considering sexual activity. This was reported to undermine young female use of contraception.

The findings of this study with respect to knowledge to guide professional practice and confidence levels show similarities with research in other developing contexts. Interviews with teachers in South Africa identified low levels of knowledge about education policy concerning SRH.<sup>33</sup> A study from Sri Lanka argues that there is a need for policy to guide health promotion in schools.<sup>26</sup>

Research in South Africa and Tanzania shows that teachers felt uneasy providing SRH lessons to adolescents.<sup>34</sup> The attitudes of both teachers and health workers in Tanzania were documented by Obasi<sup>35</sup> who found that, as in our study, teachers expressed views that education and contraception provision might encourage sexual activity. Confidence and attitudinal issues could be addressed in Sri Lanka through provider education, policy development and implementation. The study conducted by Helleve<sup>24</sup> showed that confidence in teaching ASRH was significantly associated with teaching experience, formal training in these subjects, school policy and priority given to teaching HIV/AIDS and sexuality at school. Gender awareness training may help Sri Lankan male teachers appreciate and place more confidence in the abilities of their female colleagues.<sup>36</sup>

Health provider education and training may also be useful to address attitudes towards adolescent contraception. A study in Kenya and Zambia found that nurses with more education held empathetic attitudes and youth friendly views.<sup>37</sup> Few health providers in our study discussed the minimum ASRH service delivery package developed by the Sri Lankan Ministry of health.<sup>30</sup> This may indicate that providers are unaware of these practice guidelines which could be addressed by in-service training.

### *Roles and teamwork*

Participants indicated that ASRH tasks were not identified in their duties or linked to monthly reporting and

performance reviews. Experience in Tanzania<sup>38</sup> involving the training and supervision of teachers and health workers by district health and education teams officials whose job descriptions included activities related to ASRH in respective sectors, may offer some lessons that could be transferred to the Sri Lankan context. Job descriptions that include clearly stated ASRH duties linked to a well-defined ASRH service delivery package for both health workers and teachers could help to reduce role confusion and enable provider contribution to be acknowledged.

There is however little direction in the literature concerning policy and practice to best guide health and education provider ASRH interaction to facilitate appropriate and effective team work and referral across the sectors. This need for policy and direction was highlighted by our study participants. Inter-professional education<sup>39</sup> may provide a useful strategy to improve collaborative team behavior<sup>40</sup> and could provide a way forward in Sri Lanka by helping to ensure health workers and teachers are not only clear about their roles and scope of practice but also foster relationships and build teamwork for referral and support.

World Health Organization<sup>41</sup> has proposed a framework for inter-professional education and collaboration across sectors including health and education but research into its effectiveness is yet not available. If put into practice, inter-professional education and training for both teachers and primary health care workers would need to be aligned with organizational systems<sup>42</sup> such as a team-based performance management system, attention to skill-mix and an appropriate service delivery model. This commitment may require partnerships across the health and education sectors at national and provincial levels.

### *Limitations*

As the study involves one district it is not known if the findings are representative of health and education providers across rural Sri Lanka. However, findings concur with those from other studies confirming the need for intersectoral collaboration and the importance of the provision of school nurses. Parents and adolescents were not involved in this study as the focus was on providers but their participation would have elicited information regarding the perception of provider interaction and satisfaction with the services and information.

## Conclusion

This study has provided insight into the knowledge, skills, experiences; needs of education and training; and health providers concerns regarding ASRH in the Kalutara district of Sri Lanka. Inter-professional education and training of primary healthcare workers and teachers; clarification of roles and responsibilities; and effective intersectoral collaboration and co-ordination of ASRH activities are necessary to disseminate relevant information among adolescents in schools. Rigorous evaluation of these collaboration efforts is also needed.

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The authors have no conflicts of interest in this work.

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