Maternal, newborn and child health

CAN INTER-SECTORAL COLLABORATION IMPROVE ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH?

Discussion Paper: Health, media and education partnerships in developing countries

Rachel Nicholls, Shanti Raman and Alexandra Girdwood

UNSW THE UNIVERSITY OF NEW SOUTH WALES
HUMAN RESOURCES FOR HEALTH KNOWLEDGE HUB

www.hrhhub.unsw.edu.au

An AusAID funded initiative

ACKNOWLEDGEMENTS

We acknowledge the work of Dr Angela Dawson (in addition to Ms Ellie Black, Dr Alison Rutherford, Rachel Nicholls and Ms Samantha Chivers) for the original literature review that informed this discussion paper.

We would also like to acknowledge the expert contribution of Dr Elissa Kennedy in the external review of this document.

The Human Resources for Health Knowledge Hub

This technical report series has been produced by the Human Resources for Health Knowledge Hub of the School of Public Health and Community Medicine at the University of New South Wales.

Hub publications report on a number of significant issues in human resources for health (HRH), currently under the following themes:

- leadership and management issues, especially at district level
- maternal, neonatal and reproductive health workforce at the community level
- intranational and international mobility of health workers
- HRH issues in public health emergencies.

The HRH Hub welcomes your feedback and any questions you may have for its research staff. For further information on these topics as well as a list of the latest reports, summaries and contact details of our researchers, please visit **www.hrhhub.unsw.edu.au** or email **hrhhub@unsw.edu.au**

This research has been funded by AusAID. The views represented are not necessarily those of AusAID or the Australian Government.

Suggested citation:
Nicholls, R, Raman, S and Girdwood, A 2012, *Can inter-sectoral collaboration improve adolescent sexual and reproductive health? Health, media and education partnerships in developing countries,* Human Resources for Health Knowledge Hub, University of New South Wales, Sydney..

National Library of Australia Cataloguing-in-Publication entry

Nicholls, Rachell.

Can inter-sectoral collaboration improve adolescent sexual and reproductive health? Health, media and education partnerships in developing countries / Rachel Nicholls, Shanti Raman and Alexandra Girdwood.

9780733431616 (pbk.)

Adolescent sexual and reproductive health—collaboration
Adolescent sexual and reproductive health—media
Adolescent sexual and reproductive health—education

Raman, Shanti.
Girdwood, Alexandra
University of New South Wales. Human Resources for Health Knowledge Hub.

362.290835

Published by the Human Resources for Health Knowledge Hub of the School of Public Health and Community Medicine at the University of New South Wales.

Level 2, Samuels Building, School of Public Health and Community Medicine, Faculty of Medicine, The University of New South Wales, Sydney, NSW, 2052, Australia

Telephone: +61 2 9385 8464
Facsimile: +61 2 9385 1104
Web: www.hrhhub.unsw.edu.au
Email: hrhhub@unsw.edu.au
Twitter: http://twitter.com/HRHHub

Please contact us for additional copies of this publication, or send us your email address and be the first to receive copies of our latest publications in Adobe Acrobat PDF.

Design by Gigglemedia, Sydney, Australia.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

ASRH	adolescent sexual and reproductive health
AYA	African Youth Alliance
CIDT	Centre of International Development and Training, University of Wolverhampton
ECLAC	Economic Commission for Latin America and the Caribbean
HIV	human immunodeficiency virus
ISC	inter-sectoral collaboration
MoH	Ministry of Health
NGO	non-government organisation
PHAC	Public Health Agency of Canada
PI	Pathfinder International
SAFAR	Strategic Alliance Formative Assessment Rubric
SRH	sexual and reproductive health
STI	sexually transmitted infection
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

A note about the use of acronyms in this publication

Acronyms are used in both the singular and the plural, e.g. NGO (singular) and NGOs (plural).
Acronyms are also used throughout the references and citations to shorten some organisations with long names.

QUESTIONS ADDRESSED IN THIS DISCUSSION PAPER

- Does inter-sectoral collaboration (ISC) improve adolescent sexual and reproductive health (ASRH)?
- How is effectiveness of ISC measured?
- Why is collaboration functioning an important part of measuring effectiveness?

INTRODUCTION

Protecting the health of young people is of enormous importance not only for the individual, but to achieve future development goals. Currently, there are over 1.2 billion adolescents, most of who live in developing countries [UNICEF 2002]. Many of these young people face huge social and economic barriers in accessing sexual and reproductive health (SRH) services and information, but they need the right tools to be able to confront threats such as human immunodeficiency virus (HIV), sexually transmitted infections (STIs), early and unwanted pregnancies, unsafe abortion and sexual violence. These threats are among the leading causes of death and illness among adolescents in low and middle income countries [Gore et al. 2011].

Although the majority of the literature, policy documents and global health directives refer to the promise of inter-sectoral collaboration (ISC) to advance adolescent sexual and reproductive health (ASRH), there is a lack of rigorous and systematic investigation concerning this. Further, the majority of the specific challenges, successes, or the collaborative structures that supports ASRH action are not well documented. This discussion paper looks at emerging ways in which the effectiveness of ISC is being measured, identifies benefits and challenges in ISC and includes examples of successful ISC in ASRH service delivery between health, media and education in low resource settings. This discussion paper is intended as a reference document for policy and decision makers working in or with developing countries in the areas of human resources for health in ASRH.

Methods

We undertook a systematic review of the available literature from low resource settings on collaborations between health, education, and media sectors in addressing ASRH. Papers were identified through academic databases: MEDLINE, CINAHL, Scopus, OvidSP and ProQuest. Key words included: inter-sectoral collaborations, collaboration, coalitions, partnership, multi-sectoral, effectiveness, measuring, evaluate, functioning, outcomes, challenges. Relevant papers for inclusion were those with an adolescent sexual or reproductive health topic and/or those with an emphasis on measuring collaboration effectiveness. Grey literature was also collected (primarily through Google) using the previous keywords. The two case studies used in this document highlight ISC in the real world and were identified by the literature search.

WHAT IS INTER-SECTORAL COLLABORATION FOR ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH?

The World Health Organization (WHO) defines ISC as a *"recognised relationship between part or parts of different sectors of society which have formed to take action on an issue to achieve health outcomes (or intermediate health outcomes) in a way which is more effective, efficient or sustainable, than might be achieved by the health sector working alone"* [WHO 1997].

It is important to emphasise that ISCs are not simply organisations working together, but instead involves those partnerships with a commitment to mutual relationships and goals [Mattessich et al. 2001]. Key actors can include: the state (government), the market (business) and civil society (non-governmental organisations and not-for profit, etc) [Holveck et al. 2007].

The complexity of ASRH determinants makes it impossible for one institution to deal with all public health goals, therefore intervening to improve the determinants of health requires that public health stakeholders enter into inter-sectoral partnerships [O'Neill et al. 1997]. For example, efforts to empower individuals and communities, particularly adolescents and women, require the involvement of education and media sectors [ECLAC et al. 2005].

Inter-sectoral approaches for health have been employed at global, regional, national, community, and settings based levels [Public Health Agency of Canada 2007], and may be initiated from the 'top-down' or from the 'bottom up' [WHO & PHAC 2008].

The WHO has emphasised ISC in global strategies such as: the Ottawa Charter [WHO 1986]; Health For All By the Year 2000 [WHO 1981]; International Conference on Intersectoral Action for Health [WHO 1997] and the Millennium Development Goals [United Nations 2000].

The complexity of ASRH determinants makes it **impossible for one institution to deal with all public health goals**, therefore intervening to improve the determinants of health requires that public health stakeholders enter into inter-sectoral partnerships.

HOW IS EFFECTIVENESS MEASURED?

How do we know if inter-sectoral collaboration is improving adolescent sexual and reproductive health, if there are few examples of documented collaborative activities and a lack of systematic studies in this area? Experts in the collaboration field contend that ***population-level health and social improvements*** are the ultimate indicator of collaboration effectiveness. Unfortunately, these outcomes are difficult to measure because of design issues, incomplete implementation of interventions, and because visible changes take so long to be detectable [Hayes SL et al. 2011]. Their impact may not appear on quantitative assessments of health status for decades, if at all [Weiss et al. 2002].

It is perhaps for these reasons that the WHO supports measuring partnerships in terms of process and coordination, rather than just product [WHO 2003].

Lessons from previous collaborations – (primarily local level 'community coalition' literature) – suggest that solely focusing on improvements in health rather than also measuring intermediate outcomes such as behaviour and environmental changes does not accurately measure the effectiveness of the collaboration [Roussas & Fawcett 2000].

There is some empirical evidence available to show that collaborative partnerships can contribute to positive intermediate changes in people's ***knowledge, attitudes, behaviour,*** and in the ***environment*** (e.g. new policies, practices and services), and this is where the majority of the evidence lies. However, questions have arisen over the magnitude of these effects and determining the degree of attribution because of weak design [Zakocs & Edwards 2006].

Many ASRH studies do not attempt to directly determine the role of the collaboration in facilitating intermediate changes, despite the central role of this action. Nonetheless, some examples of ASRH programs (with good outcomes) that involved collaborative action are provided in Table 1 below:

TABLE 1: EXAMPLES OF ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH PROGRAMS

EXAMPLE OF CHANGE	AUTHORS	YEAR
Improved ASRH knowledge and attitude change	Fongkaew et al.	2007
	Hayes et al.	2005
Individual behaviour change – e.g. increased use of condoms, postponement of sexual activity	Larke et al.	2010
	Van Rossem & Meekers	2000
	Paine-Andrews et al.	1999
New or modified programs – e.g. ASRH education in schools, support groups	Daniels	2007
	Lewis et al.	1999
New services – e.g. the provision of health worker training, youth friendly social clubs	Tang et al.	2009
	Meekers et al.	2005
New policies – e.g. to guide provision of SRH services	Daniels	2007
New practices – e.g. improved training & supervision of health workers	Hayes et al.	2005
	Daniels	2007

WHY IS COLLABORATION FUNCTIONING AN IMPORTANT PART OF MEASURING EFFECTIVENESS?

Evidence is building to suggest that collaboration ***functioning*** should also be agreed upon outcomes to measure e.g. [Berkowitz 2001; Zakocs & Edwards 2006]. Assessing collaboration functioning helps to understand how partnerships achieve effective outcomes or the means by which these outcomes are produced.

Many of the same factors that contribute to the effectiveness and functionality of ISC also facilitate the outcomes, impacts, and sustainability of the intervention. These types of measurements may be surrogates of health outcomes because, if a collaboration functions well, it is likely to have a greater chance of achieving intermediate outcomes and health improvement [Fawcett et al. 2010].

The current literature provides little consensus on which particular collaboration factors affect health outcomes but evidence and practice suggests the following factors are critical:

- formalisation of rules and procedures
- action planning
- documentation and ongoing feedback on progress
- leadership style e.g. good facilitation and negotiation skills
- active member participation and diversity
- agency collaboration
- group cohesion
- technical and financial assistance and support

[Granner & Sharpe 2004; Roussas & Fawcett 2000; Zakocs & Edwards 2006].

Assessing collaboration functioning helps to understand how partnerships achieve effective outcomes or the means by which these outcomes are produced.

Although each collaboration and its context are unique, certain lessons can be learnt about successes and failures that can inform other partnerships. One example of an ASRH ISC that is useful because it reported population, intermediate and process outcomes is an adolescent pregnancy prevention model from Kansas [Paine-Andrews et al. 1999]. Studies like this are not easy to come by from developing countries.

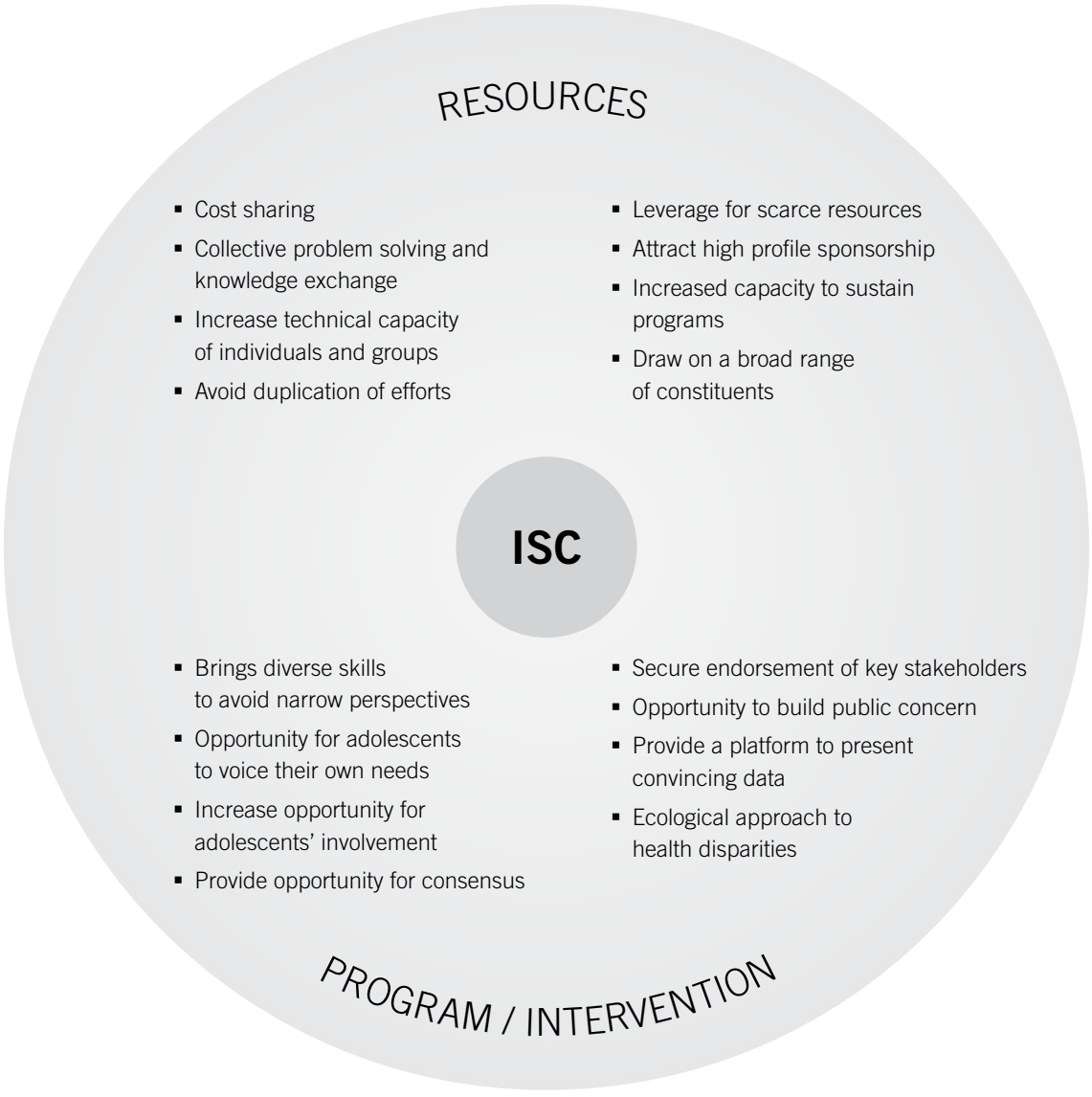
There are models, conceptual frameworks and tools available which provide guidelines for assessing and measuring the effectiveness of partnerships. Refer to the tools section at the end of this paper for more information.

BENEFITS OF INTER-SECTORAL COLLABORATION IN DEVELOPING COUNTRIES

There are a number of reasons why ISC has become such a popular strategy to address health improvement. Ultimately, collaborations provide members with a greater number of resources and a wider variety of strategies from which to tackle an issue.

Figure 1 highlights these points in more detail.

FIGURE 1: BENEFITS OF INTER-SECTORAL COLLABORATION IN DEVELOPING COUNTRIES



CHALLENGES AND LIMITATIONS OF INTER-SECTORAL COLLABORATION

Even in normal working conditions, a collaborative approach is often acknowledged as a major challenge requiring simultaneous implementation of a comprehensive range of interventions and a broad range of skills.

Researchers and practitioners over the years have noted various weaknesses of ISCs. Before implementing an ISC it's important to take into account that they can divert energy and resources from an organisation. They also may take positions contrary to, or unsupportive of, an individual organisation's interests. Differences among collaboration members may prevent them from taking strong stands on issues and decision-making may also be very slow.

Facilitating the involvement of organisations that have a different focus and little history with one another can be notoriously difficult. This is particularly the case when considering that new processes must be set up to share power and decision making [Mitchell & Shortell 2000]. Bureaucratic regulations, political barriers, cultural differences and high turnover of staff all create barriers to effective collaboration [Aguilar et al. 2010].

Collaborative capacity is also greatly influenced or altered by the larger community context [Foster-Fishman et al. 2001]. Conflict and disasters for example may disrupt ISCs, as unreliable working conditions create huge difficulties in achieving goals. In conditions such as these, documenting, monitoring and evaluation to determine ISC effectiveness may be almost impossible. Even in normal working conditions, a collaborative approach is often acknowledged as a major challenge requiring simultaneous implementation of a comprehensive range of interventions and a broad range of skills [Daniels 2007]. The amount of time needed to build capacities of many of the workers is enormous (especially if sustainability is to be achieved), and monitoring and evaluation can be inadequate [Keller & Brown 2002].

When collaborations have sought to address ASRH, they have confronted pressures arising from cultural norms relating to sexuality and HIV prevention methods with adolescents [Robles-Schrader et al. 2012]. However, HIV prevention collaborations in the USA, for example, have enabled collaboration members to forge relationships with pro- and anti- abstinence-only organisations and work toward consensus [Robles-Schrader et al. 2012].

Although progress may be slow and consensus hard won, case studies such as this highlight that collaboration can achieve change that may be less likely if organisations are fragmented. In a developing country context, a national coalition in Ghana was successful in influencing the passage of a bill against sexual and domestic violence [Oronje et al. 2011]. The use of force in marriage remains legal in Ghana, highlighting the immense challenge involved in confronting dominant cultural norms, despite the influential and collective power of a national coalition.

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH INTER-SECTORAL COLLABORATION BETWEEN THE MEDIA AND HEALTH SECTORS

Media workers play an important role in providing adolescents access to resources that promote their health and development.

Mass communications have been used with increasing success to promote the sexual and reproductive health of young adults in different countries. Mass media based programs have shown evidence of improved knowledge, attitudes and positive behaviour changes [e.g. Magnani 2001; Meekers et al. 2005; Van Rossem & Meekers 2000].

Available evidence shows interventions to improve ASRH should provide accurate consistent messages, social support, life skills and access to contraception and services [Speizer et al. 2003]. Media strategies are one way in which these needs can be provided or promoted.

Media workers play an important role in providing adolescents access to resources that promote their health and development. In developing countries where a substantial proportion of adolescents are not in school or are illiterate, this access to non formal education is particularly important [Govinda 2003]. Adolescents are also thought to engage well with innovative social marketing and entertainment education media initiatives [UNFPA 2012].

Media workers are most often thought of as journalists (print and broadcast), but also include information technology experts; web developers, mobile phone and gaming roles, advertising and public relations, as well people working in 'traditional media' such as storytellers, puppeteers, visual artists, actors, directors, singers and dancers [Panford et al. 2001]. Traditional media is considered particularly useful in engaging people from cultures that are largely based on oral histories and traditions [Panford et al. 2001].

MEDIA AND HEALTH CASE STUDY

The African Youth Alliance (AYA) is an inter-sectoral collaboration of organisations that sought to improve adolescent ASRH in four African countries, reaching over 35 million stakeholders through media campaigns, and training young people in Life Planning Skills.

Collaborating partners included the United Nations Population Fund (UNFPA), PATH, and Pathfinder International (PI), governments, non-government organisations (NGOs), community organisations, youth, parents and religious groups.

Evidence for ISC effectiveness

Evidence of health improvement:
Not measured

Evidence of intermediate outcomes:
Combined case-control and self-reported exposure design showed that the AYA collaboration had significant effects on sexual knowledge, attitudes, and behaviours of the targeted groups. Amongst stakeholders there was improved knowledge and an increase in commitments and actions supportive of ASRH.

Significant community and systems change was reported, including the development of ASRH policy, integration of ASRH activities into existing programs, improved availability and quality of youth friendly services, institutional capacity building, training of teachers and an increase in resource allocation for ASRH.

Collaboration functioning:
Important lessons learnt are identified. No information provided about measuring or assessing functioning [Daniels 2007].

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH INTER-SECTORAL COLLABORATION BETWEEN THE EDUCATION AND HEALTH SECTORS

Teachers are considered critical in providing SRH information to adolescents, and evidence shows that providing this kind of information is vital in improving adolescent health.

School services which engage the health sector are common in developing countries [Adeleye & Ofili 2010]. Key partnerships occur between education workers such as teachers, school administrators, peer educators and health workers based in clinics, NGOs, Ministries of Health (MoHs), and research institutions.

Teachers are considered critical in providing SRH information to adolescents, and evidence shows that providing this kind of information is vital in improving adolescent health, for example, lowering teenage pregnancy and HIV infection [Jukes et al. 2008.]

EDUCATION AND HEALTH CASE STUDY

What was the intervention?

The MEMA kwa Vijana Project: Using data from a prior population-based survey of 9,445 15-19 year old people, 20 communities were stratified and randomly allocated to either receive the new interventions or standard interventions.

The intervention program had four major components: community activities; teacher-led, peer-assisted sex education in primary school; training and supervision of health workers to provide "youth-friendly" health services; and peer condom social marketing for youth.

Collaborating partners included the Tanzanian National Institute for Medical Research, the African Medical and Research Foundation, the London School of Hygiene and Tropical Medicine and the Ministries of Health and Education & Culture of the Government of Tanzania.

Evidence of ISC effectiveness

Evidence of health improvement:
This was measured but showed no reduction in HIV incidence (seroconversion among participants who were HIV negative at enrolment) and seroprevalence of Herpes simplex virus type 2 in a cohort of 9,645 adolescents at final follow-up. The intervention also had no consistent impact on six further biological outcomes.

Evidence of intermediate outcomes:
The intervention had a statistically significant impact on all knowledge and attitudinal outcomes and also on reported condom use and STI symptoms, sexual debut or having multiple sexual partners. A follow up study in 2010 [Larke et al. 2010] found a modest increase in young people's use of health services seeking care for STI-related symptoms.

Collaboration functioning:
No information was provided about measuring these factors [Hayes et al. 2005].

CONCLUSION

The outcomes from these two ASRH ISC case studies show evidence of positive intermediate outcomes and this is consistent with the wider collaboration literature. However, also consistent with the wider literature, there is no attempt to measure the contribution of the collaboration [Hayes et al. 2005] or no details are provided about the measurement system that demonstrated the contribution of the collaborative process to outcomes [Daniels 2007]. Therefore it is difficult to say whether the findings were due to the ISC or to individual programs. In addition, changes due to collaborative action may have gone undetected because the right questions are not being asked.

The education and health ISC [Hayes et al. 2005] sought to measure ASR health improvement but, disappointingly, did not find any. Findings from the larger body of health collaboration literature has found some population level outcomes that could be attributed to activities of a collaborative partnership as well as evidence that partnerships contribute somewhat to a widespread change in health behaviour [Roussas & Fawcett 2000]. It must also be noted that much of this evidence comes from the 'community coalition' field which differ from ISC in that they are usually community driven rather than agency driven.

As a result, these two ASRH case studies demonstrate what is found in the wider literature – not enough information is collected to determine the attribution of the collaboration to outcomes. However, ways of measuring change must be improved before we can say with any certainty that inter-sectoral collaboration can improve adolescent sexual and reproductive health.

RECOMMENDATIONS FOR PRACTICE AND POLICY

- Collaborations should be measured in terms of both empirical outcome measures and descriptions of inter-sectoral activities, roles and responsibilities.
- Collaboration members should systematically document their progress in facilitating environmental change.
- Evaluations and findings should be shared between partners and be made widely available.

USEFUL TOOLS

Strategic Alliance Formative Assessment Rubric (SAFAR), a four-step evaluation process to help self-assess and gauge strength of the collaborative effort over time: [Gajda R 2004] Utilizing Collaboration Theory to Evaluate Strategic Alliances. *American Journal of Evaluation March 2004 25: 65-77*

A model for measuring process and outcomes in communication development interventions [Figueroa et al. 2002]: http://www.communicationforsocialchange.org/pdf/socialchange.pdf

Multi–agency planning using the Logical Framework Approach (2005). Philip Dearden, Centre for International Development and Training (CIDT), University of Wolverhampton: http://www2.wlv.ac.uk/webteam/international/cidt/cidt_multi_agency_planning.pdf

Collaboration Factors Inventory, Amherst H Wilder Foundation, 2008. An online tool to help you assess how your collaboration is going: http://wilderresearch.org/tools/cfi/index.php

REFERENCES

Adeleye, O & Ofili, A 2010, 'Strengthening Intersectoral Collaboration for Primary Health Care in Developing Countries: Can the Health Sector Play Broader Roles?', J *Environ Public Health.*

Aguilar, D, Abesamis-Mendoza, N, Ursua, R, Divino, L, Cadag, K & Gavin, N 2010, 'Lessons Learned and Challenges in Building a Filipino Health Coalition', *Health Promotion Practice,* vol. 11, no. 3, pp. 428-36.

Berkowitz, B 2001, 'Studying the Outcomes of Community-Based Coalitions', *American Journal of Community Psychology,* vol. 29, no. 2, pp. 213-27.

Daniels, U 2007, 'Improving Health, Improving Lives: Impact of the African Youth Alliance and New Opportunities for Programmes', *African Journal of Reproductive Health / La Revue Africaine de la Santé Reproductive,* vol. 11, no. 3, pp. 18-27.

ECLAC, UNFPA & Pan American Health Organization (PAHO) 2005, *The Right to Health and the Millennium Development Goals.*

Fawcett, S, Schultz, J, Watson-Thompson, J, Fox, M & Bremby, R 2010, 'Building Multisectoral Partnerships for Population Health and Health Equity', *Preventing Chronic Disease. Public Health Practice, Research and Policy,* vol. 7, no. 6.

Figueroa, M, Kincaid, D, Rani, M & Lewis, G 2002, *Communication for Social Change: An Integrated Model for Measuring the Process and its Outcomes,* Rockefeller Foundation, <http://www.communicationforsocialchange.org/pdf/socialchange.pdf>.

Fongkaew, W, Fongkaew, K & Suchaxaya, P 2007, 'Early adolescent peer leader development in HIV prevention using youth-adult partnership with schools approach', *Journal of the Association of Nurses in AIDS Care,* vol. 18, no. 2, pp. 60-71.

Foster-Fishman PG, Berkowitz SL, Lounsbury DW, Jacobson S & Allen NA 2001, 'Building collaborative capacity in community coalitions: A review and integrative framework', *American Journal of Community Psychology,* vol. 29, no. 2, pp. 241--61.

Gajda R 2004, 'Utilizing Collaboration Theory to Evaluate Strategic Alliances', *American Journal of Evaluation,* vol. 25, no. 1, pp. 65-77.

Gore, Bloem, Patton GC, Ferguson J, Joseph V, Coffey C, Sawyer S & Mathers C 2011, 'Global burden of disease in young people aged 10–24 years: a systematic analysis', *The Lancet,* vol. 377, no. 9783, pp. 2093-102.

Govinda, R 2003, *Non-formal Education and Poverty Alleviation. Exploring Experiences from Asia,* National Institute of Educational Planning and Administration, New Delhi.

Granner, ML & Sharpe, PA 2004, 'Evaluating community coalition characteristics and functioning: a summary of measurement tools', *Health Education Research,* vol. 19, no. 5, pp. 514-32.

Hayes, R, Changalucha, J, Ross, D, Gavyole, A, Todd, J, Obasi, A, Plummer, M, Wight, D, Mabey, D & Grosskurth, H 2005, 'The MEMA kwa Vijana Project: Design of a community randomised trial of an innovative adolescent sexual health intervention in rural Tanzania', *Contemporary Clinical Trials,* vol. 26, no. 4, pp. 430-42.

Hayes SL, Mann MK, Morgan FM, Kitcher H, Kelly MJ & Weightman AL 2011, *Collaboration between local health and local government agencies for health improvement (Review),* The Cochrane Collaboration.

Holveck JC, Ehrenberg JP, Ault S, Rojas R, Vasquez J, Cerqueira M, Ippolito-Shepherd J, Genovese M & Periago M 2007, 'Prevention, control, and elimination of neglected diseases in the Americas: Pathways to integrated, inter-programmatic, inter-sectoral action for health and development', *BMC Public Health,* vol. 7, no. 1, p. 6.

Jukes, M, Simmons, S & Bundy, D 2008, 'Education and vulnerability: the role of schools in protecting young women and girls from HIV in southern Africa', *AIDS,* vol. 22, no. Suppl 4, pp. S41-S56.

Keller, S & Brown, J 2002, 'Media interventions to promote responsible sexual behavior', *Journal of Sex Research*, vol. 39, no. 1, pp. 67-72.

Larke, N, Cleophas-Mazige, B, Plummer, M, Obasi, A, Rwakatare, M, Todd, J, Changalucha, J, Weiss, H, Hayes, R & Ross, D 2010, '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', *Journal of Adolescent Health,* vol. 47, no. 5, pp. 512-22.

Lewis, R, Paine-Andrews, A, Fisher, J, Custard, C, Fleming-Randle, M & Fawcett, S 1999, 'Reducing the Risk for Adolescent Pregnancy: Evaluation of a School/Community Partnership in a Midwestern Military Community', *Family & Community Health,* vol. 22, no. 2, pp. 16-30.

Magnani, R 2001, *Impact of a health communications programme on adolescent reproductive health knowledge, attitudes and behaviors in three cities in Paraguay,* Pathfinder International, Washington, DC.

Mattessich, P, Murray-Close, M & Monsey, B 2001, *Collaboration: What makes it work,* Amherst H. Wilder Foundation, St Paul.

Meekers, D, Agha, S & Klein, M 2005, 'The impact on condom use of the "100% Jeune" social marketing program in Cameroon', *Journal of Adolescent Health,* vol. 36, no. 6, pp. 530-.

Mitchell, S & Shortell, S 2000, 'The governance and management of effective community health partnerships: a typology for research, policy and practice', *Milbank Quarterly,* vol. 78, pp. 241-89.

O'Neill, Lemieux, Groleau G, Fortin J-P & Lamarche P 1997, 'Coalition theory as a framework for understanding and implementing intersectoral health-related interventions', *Health Promotion International,* vol. 12, no. 1, pp. 79-87.

Oronje, RN, Crichton, J, Theobald, S, Oye Lithur, N & Ibisomi, L 2011, 'Operationalising sexual and reproductive health and rights in sub-Saharan Africa: constraints, dilemmas and strategies', *BMC International Health and Human Rights,* vol. 11, pp. 1-11.

Paine-Andrews, A, Harris, K, Fisher, J, Lewis, R, Williams, E, Fawcett, S & Vincent, M 1999, 'Effects of a Replication of a Multicomponent Model for Preventing Adolescent Pregnancy In Three Kansas Communities', *Family Planning Perspectives,* vol. 31, no. 4, pp. 182-9.

Panford, S, Nyaney, M, Amoah, S & Aidoo, N 2001, 'Using Folk Media in HIV/AIDS Prevention in Rural Ghana ', *Am J Public Health,* vol. 91, no. 10, pp. 1559-62.

Public Health Agency of Canada 2007, *Crossing Sectors - experiences in intersectoral action, public policy and health,* Public Health Agency of Canada.

Robles-Schrader, GM, Harper, GW, Purnell, M, Monarrez, V & Ellen, JM 2012, 'Differential challenges in coalition building among HIV prevention coalitions targeting specific youth populations', *Journal of Prevention and Intervention in the Community,* vol. 40, no. 2, pp. 131-48.

Roussas, S & Fawcett, S 2000, 'A Review of Collaborative Partnerships as a Strategy for Improving Community Health', *Annual Review of Public Health,* vol. 21, pp. 369-402.

Speizer, IS, Magnani, RJ & Colvin, CE 2003, 'The effectiveness of adolescent reproductive health interventions in developing countries: a review of the evidence', *Journal of Adolescent Health,* vol. 33, no. 5, pp. 324-48.

Tang, S, Tian, L, Cao, W, Zhang, K, Detels, R & Li, V 2009, 'Improving Reproductive Health Knowledge in Rural China—A Web-Based Strategy', *Journal of Health Communication,* vol. 14, no. 7, pp. 690-714.

UNFPA *Education and Empowerment: Moving from Information to Action,* viewed 20 February 2012, <http://web.unfpa.org/adolescents/education.htm#media>.

UNICEF 2002, *Adolescence: A Time That Matters*, UNICEF, New York.

United Nations 2000, *Millennium Declaration,* United Nations, New York.

Van Rossem, R & Meekers, D 2000, 'An evaluation of the effectiveness of targeted social marketing to promote adolescent and young adult reproductive health in Cameroon', *AIDS Education & Prevention,* vol. 12, no. 5, pp. 383-404.

Weiss, E, Anderson, M & Lasker, R 2002, 'Making the Most of Collaboration: Exploring the Relationship Between Partnership Synergy and Partnership Functioning', *Health Education and Behaviour,* vol. 29, no. 6, pp. 683-98.

WHO 1981, *Global Strategy For Health for All By The Year 2000,* WHO, Geneva.

—— 1986, *Ottawa Charter for Health Promotion: An International Conference on Health Promotion—The Move Towards a New Public Health,* World Health Organization, Geneva, Switzerland.

—— 1997, *Intersectoral action for health: a cornerstone for health-for-all in the twenty-first century,* World Health Organization, Halifax, Canada.

—— 2003, *The Power of Partnership,* World Health Organization Geneva.

WHO & PHAC 2008, *Health Equity Through Intersectoral Action: An Analysis of 18 Country Case Studies,* WHO, Public Health Agency of Canada.

Zakocs, RC & Edwards, EM 2006, 'What Explains Community Coalition Effectiveness?: A Review of the Literature', *American Journal of Preventive Medicine,* vol. 30, no. 4, pp. 351-61.

ALSO AVAILABLE IN MATERNAL, NEWBORN AND CHILD HEALTH

Reviews on:

- Bangladesh
- Cambodia
- Indonesia
- Fiji
- Lao PDR
- Solomon Islands
- Philippines
- Timor-Leste
- Papua New Guinea
- Vanuatu

Discussion Papers on:

- Improving the quality of HRH information: A focus on the providers of maternal, neonatal and reproductive health care and services at community level in the Asia and Pacific regions
- Towards a comprehensive approach to enhancing the performance of health workers in maternal, neonatal and reproductive health at community level: Learning from experiences in the Asia and Pacific regions

To obtain publications or to subscribe to our email news visit **www.hrhhub.unsw.edu.au** or email **hrhhub@unsw.edu.au**

THE KNOWLEDGE HUBS FOR HEALTH INITIATIVE

The Human Resources for Health Knowledge Hub is one of four hubs established by AusAID in 2008 as part of the Australian Government's commitment to meeting the Millennium Development Goals and improving health in the Asia and Pacific regions.

All four Hubs share the common goal of expanding the expertise and knowledge base in order to help inform and guide health policy.

Human Resource for Health Knowledge Hub,
University of New South Wales

Some of the key thematic areas for this Hub include governance, leadership and management; maternal, neonatal and reproductive health workforce; public health emergencies; and migration.
www.hrhhub.unsw.edu.au

Health Information Systems Knowledge Hub,
University of Queensland

Aims to facilitate the development and integration of health information systems in the broader health system strengthening agenda as well as increase local capacity to ensure that cost-effective, timely, reliable and relevant information is available, and used, to better inform health development policies.
www.uq.edu.au/hishub

Health Finance and Health Policy Knowledge Hub,
The Nossal Institute for Global Health (University of Melbourne)

Aims to support regional, national and international partners to develop effective evidence-informed national policy-making, particularly in the field of health finance and health systems. Key thematic areas for this Hub include comparative analysis of health finance interventions and health system outcomes; the role of non-state providers of health care; and health policy development in the Pacific.
www.ni.unimelb.edu.au

Compass: Women's and Children's Health Knowledge Hub,
Compass is a partnership between the Centre for International Child Health, University of Melbourne, Menzies School of Health Research and Burnet Institute's Centre for International Health.

Aims to enhance the quality and effectiveness of WCH interventions and focuses on supporting the Millennium Development Goals 4 and 5 – improved maternal and child health and universal access to reproductive health. Key thematic areas for this Hub include regional strategies for child survival; strengthening health systems for maternal and newborn health; adolescent reproductive health; and nutrition.
www.wchknowledgehub.com.au

Human Resources for Health Hub

Send us your email and be the first to receive copies of future publications. We also welcome your questions and feedback.

UNSW THE UNIVERSITY OF NEW SOUTH WALES

HUMAN RESOURCES FOR HEALTH KNOWLEDGE HUB

HRH Hub @ UNSW
School of Public Health and Community Medicine
Samuels Building, Level 2, Room 209
The University of New South Wales
Sydney, NSW, 2052
Australia

T +61 2 9385 8464
F +61 2 9385 1104

hrhhub@unsw.edu.au

www.hrhhub.unsw.edu.au
Twitter: http://twitter.com/HRHHub

A strategic partnerships initiative funded by the Australian Agency for International Development