IDENTIFYING FUTURE RESEARCH NEEDS FOR THE PROMOTION OF YOUNG PEOPLE'S SEXUAL HEALTH IN NEW ZEALAND

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Abstract

An increasing focus on the sexual health status of New Zealand youth has followed in the wake of somewhat alarming statistics on abortion rates, sexually transmitted infections and teenage pregnancy. The call for further New Zealand research to guide policy and practices to improve the sexual health status of young people, as stipulated in the Sexual and Reproductive Health Strategy (Ministry of Health 2001a), is both timely and necessary. This paper addresses the question of what research is needed to inform the improvement of young people's health status. Two approaches are employed: firstly, the paper reviews current New Zealand literature to identify the research knowledge currently available to inform development of the strategy, and, secondly, the paper draws on the findings of a scoping study that aimed to identify research needs from the perspective of those working as educators, service providers and researchers in the field of adolescent sexual health. Taken together, the literature review and study findings suggest the need for more qualitative research to illuminate the evident gap between young people's knowledge and practice, and the considerable need for more evaluation of both services and sexuality education programmes.

INTRODUCTION

Currently there is national concern about the reproductive health status of New Zealand youth. Available data suggests there is a chlamydia epidemic that peaks in the 15–19 years age group, with the rates of gonorrhoea also high and increasing (Ministry of Health 2001b). In addition to concerns about sexually transmitted infections (STIs), New Zealand currently has the third-highest teenage pregnancy rate in the OECD, with rates among young Māori and Pacific women comprising a significant component of this statistic (Statistics New Zealand 2001). The increasing rate of adolescent

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abortions among young women suggests that a significant number of these pregnancies are unwanted (Singh and Darroch 2000). Coupled with, and related to, these facets of young people's reproductive health are data that reveal patterns among teenagers of decreasing age of first sexual intercourse and an increasing number of sexual partners (Dickson et al. 1993, Marsault et al. 1997). Indeed, recent New Zealand research suggests that, conservatively, around one-third of teenagers are sexually experienced before the age of 16 (Fenwicke and Purdie 2000). Early sexual behaviour is associated with greater likelihood of teenage pregnancy (Woodward, Horwood et al. 2001) and poor sexual health (Andersson-Ellstromet et al. 1995, Durbin et al. 1993, Seidman et al. 1994, Thompson et al.1993).

There are substantial costs associated with these reproductive health problems among youth. On one level there are the economic costs of providing services for sexual health problems and supporting young women who choose to parent their children alone. At another level there are health costs such as those arising from the association of STIs with pelvic inflammatory disease and ectopic pregnancy (associated with infertility) for young women and non-specific urethritis for young men (Youngkin 1995). Other potential health costs include physical or psychological problems associated with pregnancy, and the need for long-term health care where risky, early and frequent sexual intercourse leads to HIV Aids. The social costs may have wide-ranging effects, from loss of education and loss of employment or employment opportunities in the future, to loss of family and friends. Clearly, we are a society that needs to be addressing the reproductive health status of our youth.

The Sexual and Reproductive Health Strategy (Ministry of Health 2001a) presented the need for ongoing research to identify effective ways of working with youth to improve their sexual and reproductive health. Indeed, the document specifies "information" as the fourth arm of the strategy, incorporating the very general goal to "undertake relevant research, including evaluation of this strategy". To date, however, it seems that government strategies and policies on young people's reproductive and sexual health have drawn primarily on overseas research and a handful of New Zealand studies, a good number of which are limited by "mainstream" samples (that is, predominantly Pākehā, urban and heterosexual).

While it is evident that more New Zealand research is needed, it is important to establish the focus of that research. One way of doing so is to examine the current literature and identify the gaps; this approach informs the first goal of this article. Another way is to seek the views of those working and researching in the area of young people's sexual health who, on the basis of their first-hand knowledge and experience, can provide valuable input on the needs and directions for both policy and research on young people's sexual health issues; this approach informs the second goal of this article. The article then integrates these two sources of information to suggest

implications for a research agenda aimed at informing practices to enhance the sexual wellbeing of New Zealand youth.

NEW ZEALAND SEXUALITY RESEARCH

A literature search of New Zealand research on young people's sexuality and sexual health produced a database of 56 published articles, books or reports between 1975 and 2002. Most of the literature is relatively recent, all but seven dating from 1990 onwards. The majority of these publications were on the topics of sexual health (17.8%), sexual behaviour (17.8%), teenage pregnancy (14.3%), sexuality education (12.5%), sexual coercion and abuse (8.9%), and sexual knowledge and attitudes (7.1%). The remaining articles spanned, in order of prevalence, sexuality, homosexuality, social policy and risk factors or risk taking. Most publications were articles in New Zealand or Australasian journals (46.4%), international journals (28.6%) or reports (15.1%), the remainder constituting books, book chapters, conference papers, dissertations and professional publications. The following review is mainly of peer-reviewed publications, and focuses on practice rather than theory.

Overall the literature is dominated by quantitative research, most typically the use of surveys or structured interviews that are subsequently statistically analysed for frequency of reported events, correlations between reproductive health status and psychosocial factors, or group differences (such as gender, age and ethnicity). For example, a myriad of individual, social and family factors have been identified as risk factors related to early sexual experience, unsafe sex practices, unwanted pregnancies and STIs. The risk factors include conduct disorder, poor educational performance, early maturation, child sexual abuse, ethnicity, and socio-economic disadvantage (e.g., Lynskey and Fergusson 1993, Dickson et al. 1993, Paul et al. 2000, Woodward, Fergusson et al. 2001, Fergusson et al. 1997). The literature on risk factors or predictor models is useful because it identifies the broad social and psychological factors associated with risky sexual behaviours. However, a statistical approach is unable to identify the nuanced ways those factors operate at the level of individual understanding. Taking socio-economic status or class, for example, educational aspirations encourage contraception use among middle-class girls, but for working-class girls risky sexual behaviours may allow them to escape school (Nash 2001a).

Understanding how social and cultural factors operate to influence young people's sexual behaviour is paramount to the development of effectively targeted sexual and reproductive health programmes. Using predictor models, as most risk factor studies do, does not explain the meanings of socio-cultural factors, nor does it access the more complex factors influencing sexual behaviours such as those pertaining to the relationship. For example, qualitative research suggests that trusting a partner (Flood 2001), romance (Gavey and McPhillips 1997, Jackson 2001), stage of the relationship

(Flood 2001, Wight 1994), gender role expectations, gender power dynamics and the subjective meanings of condoms (Wight 1994) all influence safe sex practices or decisions about having sex. Prevention strategies that fail to account for social, cultural and relationship milieu are therefore likely to miss the mark.

Knowledge and behaviours are another focus of the sexuality and sexual health research literature. Both quantitative and qualitative methods have been used to investigate young people's knowledge, attitudes and sexual behaviours. Survey research findings indicate a high percentage of young people report and demonstrate considerable knowledge about AIDS and STIs (Allen 2001, Duncan and Bergen 1997, Fergusson et al. 1994, Lungley et al. 1993) as well as how to use condoms (Allen 2001). Indications from survey and interview studies suggest, however, that more general knowledge about sex and sexual biology (for example, fertility cycles) lags behind safer sex knowledge (Collins 2002, Duncan and Bergen 1997). The source of young people's knowledge has been less well documented in the New Zealand literature, but a study conducted for the Department of Health revealed that adolescents surveyed turned to friends of either gender and mothers to talk about sex; they also used television programmes and sexuality education classes as ways to learn about sex (Lungley et al. 1993).

While the levels of knowledge reported might be encouraging, whether this knowledge is then applied to practice is the critical factor in reducing STIs and unwanted pregnancy. Allen's work (2001) makes an important contribution to the issue of the knowledge–practice gap. Her findings point to the greater status young people give to sexual knowledge gained from personal experience (practice) than other sources such as sexuality education classes. Thus, sexuality education will need to shift its focus from factual knowledge to incorporate ways of linking material more closely to practice if it is to obtain greater salience and status in the eyes of its target audience and, accordingly, be more effective. However, the delivery of sexuality education also needs closer examination – not so much the techniques but the ambience. A recent UNICEF report (UNICEF 2001), for example, suggests that unless sexuality programmes are offered in a spirit of societal openness about sexuality and contraception from an early age they may achieve very little. Research with parents and teachers – notably absent in New Zealand sexuality education research – would be one way of investigating the spirit of how matters of sexuality are addressed in the home and at school.

The sexual practices of young people constitute one of the more substantive areas of New Zealand research literature. The rates of young people reporting they are sexually active varied across studies: around 25% of 16-year-olds in the Christchurch Developmental Study cohort (Fergusson and Lynskey 1994), 20.6% of males and 21.6% of females in a national high school sample (Adolescent Health Research Group 2003), 39.4% of 14-year-olds in a large Hawke's Bay high school sample (Fenwicke and Purdie 2000), 28% of males in the Dunedin Developmental Study (Dickson et al. 1998), and

40% in a substantial high school sample of 16-year-olds (Lungley et al. 1993). Reported use of condoms varies from 60% and 88% (e.g., Durex Global Sex Survey 2002, Lungley et al. 1993, Lynskey and Fergusson 1993, Adolescent Health Research Group 2003) to 50% or less (e.g., Coggan et al. 1997, Corwin et al. 2002). All of these studies used large samples, but not all could be described as representative of the general New Zealand population. Notably, reported use of condoms does not line up with the statistics on the rates of STIs, particularly chlamydia, in the 15–19 years age bracket (Ministry of Health 2001b). The discrepancy could reflect the reliability problems of self-report and retrospective data, or the failure of measures to pick up whether condoms are used consistently in a sexual relationship. Flood's (2001) research, for example, suggests that condom use is higher early in a relationship but decreases over time. Questions that ask whether condoms were used in the last relationship or the last 12 months will generate the answer "yes" if used at all, but asking whether condoms had always been used in every relationship would be a more salient and useful question.

Sexual safety issues assume a different perspective in the context of a coercive or unwanted sexual relationship where negotiation is, by definition, absent. From the few New Zealand studies documented, it would seem that a good many young women are involved in at least one unwanted sexual relationship, particularly in early adolescence and particularly if that relationship is with an older, more experienced partner (Dickson et al. 1998, Jackson et al. 2000, Hird and Jackson 2001). Among Lungley et al.'s (1993) large representative sample of high school students, more than half believed boys would be willing to have sex with a girl who did not want to and around half acknowledged difficulties for girls in telling partners they did not want to have sex. Sexual health issues are very much linked with the presence of sexual coercion in a relationship, increasing the risks of unprotected sexual activity and therefore STIs, abortion and unwanted teenage pregnancy.

The extent of teenage pregnancy has been headlined and heralded as a significant problem in the wake of New Zealand's ranking as having the third highest rates among "rich nations" (UNICEF 2001). It is, then, somewhat surprising perhaps that comparatively little New Zealand research has been undertaken on the subject. The few publications available address social policy (Collins 2000, Nash 2001b), risk factors (Romans et al. 1997, Woodward, Fergusson et al. 2001), or an examination of demographic trends (Dickson et al. 2000, Singh and Darroch 2000). The risk factor publications problematise teenage pregnancy, and none of the articles address the issue of whether the pregnancies are wanted or unwanted.

One way of trying to gain at least some impression of the extent of unwanted teenage pregnancies is to examine the abortion rates. It appears that young European women are considerably more likely to terminate pregnancies than young Māori and Pacific women, as reflected in the markedly higher pregnancy rate compared with birth rate

for the former and high birth rates for the latter (Dickson et al. 2000). Such trends point to the importance, once again, of researchers addressing cultural factors in a way that illuminates the meanings of sexual behaviour and its consequences.

Efforts to increase sexual safety and lower teenage pregnancy have largely been attempted through the implementation of sexuality education, recently made a requirement in the health curriculum, but not compulsory if parents object. To date, there appears to be a vacuum in documented research on the effectiveness of various approaches to sexuality education, but this may reflect the historically ad hoc teaching of the subject. Only two publications explicitly evaluating sexuality education programmes emerged in the literature research, both emanating from Elliott's work in Auckland (Elliott et al. 1998, Elliott and Lambourn 1999).

Elliott et al. (1998) found that at the very age when students are more likely to be entering sexual relationships (16–18), sexuality education programmes were actually less available, especially for the more academically oriented students. The highest coverage of topics centred on puberty, safer sex and STIs, with decreasing attention paid to areas such as gender roles, negotiating skills, sexual identity, relationship choices and sexual orientation. Yet it was these latter topics that students wanted to know more about in addition to abortion, sexual abuse, masturbation, date rape, parenthood, emotional aspects of sex, sexual identity and emergency contraception. Many of the areas identified by the students are important aspects of sexual wellbeing that should be incorporated into sexual health curricula.

Across all areas reviewed thus far, there is a significant gap in published research on young Māori, despite the fact that teen pregnancy and STI rates are particularly high among this group. Indeed, the birth rates for young Māori women are reportedly five times higher than for young Pākehā women, for whom rates are high but comparable with several other Commonwealth countries (Dickson et al. 2000). A good number of the available publications on risk factors and sexual behaviour have been drawn from the Dunedin and Christchurch developmental studies. Neither of these significant cohort studies included a representative sample of Māori. Some publications either fail to specify ethnicity in any helpful way (e.g., Davis and Lay-Yee 1999) or to mention it at all (e.g., Romans et al. 1997).

A few studies have sought to include representative samples of Māori (e.g., Allen 2001, Fenwicke and Purdie 2000, Lungley et al. 1993), although processes and methodologies seem to be the same for Māori and Pākehā. In contrast, Elliott and Lambourn (1999) describe the development of a peer sexuality education programme that clearly respected the status of tangata whenua and incorporated taha Māori into the programme. Although more research is needed to realise the important goals of enhancing the sexual health status of young Māori, it is surely Māori who should guide

the issues researched, how the research is conducted, and by whom. Several kaupapa Māori research projects on sexual health issues for young Māori are currently under way and will provide much-needed understandings about the ways forward for addressing Māori youth sexual health concerns.

In summary, the scope of the New Zealand research literature on adolescent sexuality and sexual health is weighted toward the identification of sexual behaviours and the risk factors related to various sexual behaviours and sexual health problems. To establish a knowledge base of young people's sexual practices as they impact on sexual health and to identify the more vulnerable populations who may encounter various sexual health problems are useful and important achievements. However, they do not contribute substantively to our knowledge of how to implement effective prevention programmes or develop effective policies (see Nash 2001b).

Yet when we examine the qualitative literature we begin to obtain a sense of the dynamics that may explain the knowledge–practice gap: underdeveloped negotiating skills; being caught up in a passive, paralysing, romantic discourse; privileging of experience over education; or playing out traditional gender identities. Perhaps it is issues related to these aspects that need to be given more attention in sexuality education since young people seem to be getting the messages about STIs and pregnancy (the targets of the Sexual and Reproductive Health Strategy) but not following through on them.

From a research perspective, we have a good idea about sexual practices and the sexual health status of young people, but we clearly need to know more about the slippage that leads to the concerning levels of STIs, especially among rangatahi (young Māori). In the next section of this paper the views of those who work with youth as sexuality health educators, service providers and researchers are presented.

STAKEHOLDER INTERVIEWS

Between November 2001 and September 2002 interviews with key stakeholders (researchers, educators, sexual health service providers) were undertaken in Auckland, Wellington and Christchurch. Stakeholders were recruited using a snowball technique in which interviewees provided suggestions about additional stakeholders to interview. A total of 24 stakeholders participated in the interviews from a range of organisations and roles within those organisations.

Although the sampling technique did not aim for representativeness, the final pool of participants did represent most aspects of teen sexuality work. Most services were community based, but a residential centre was included. The majority of educators, researchers and service providers were Pākehā and worked in Pākehā organisations.

The Māori service providers who participated worked in a kaupapa Māori organisation. While participants were based in urban centres, some of them serviced large rural areas, particularly in the South Island.

Interviews were semi-structured and aimed to provided an informal context in which participants could talk about their perceptions of current sexuality health issues for young people: their knowledge of local research or programmes, the nature of the work in which they were involved, and areas of research that would be useful to their work as providers, managers or educators. The key issues relating to each of these topics are presented below.

Knowledge of Local Research or Programmes

Many of our participants referred to research published outside of mainstream journals. For example, we learned of work presented at various national conferences, government or departmental reports, as well as ongoing or completed Master's and PhD theses. Although full details could not always be given, we subsequently managed to locate some of these documents (included in the earlier review of New Zealand research). The range of topics across these various internal reports, papers and theses incorporated teenage pregnancy, sexual experimentation, young men's sexuality, service evaluation, sexuality education, sexual practices, romance, and sexual knowledge, attitudes and behaviour.

Scope of Work Being Done

Our interviews revealed the considerable scope of work being undertaken in both prevention and intervention programmes targeting sexual health and sexuality issues for young people. The New Zealand Family Planning Association (FPA) is a national body that provides sexual health services as well as education both in schools and in the wider community. Educators we interviewed identified diverse involvement in programmes such as peer sexuality education, peer support, school education classes and targeted education (for example, for Work and Income New Zealand, prison inmates, people with disabilities). The FPA also runs school-based sexual health clinics, established on the principle that accessibility enhances early intervention and opportunities to seek advice that may prevent sexual health problems (for example, finding out about contraception to prevent STIs or pregnancy). Although not formally evaluated, available statistics suggest significant decreases in pregnancy rates within schools serviced by the FPA clinics.

In the South Island public health initiatives have established various programmes and projects. For example, participants described a one-year project to reduce teenage pregnancy on the West Coast involving more than 200 youth. Other programmes

include contraception and safe sex programmes, a "condoms in cabs" project, the setting up of 0800 numbers for sexual health services, and public awareness campaigns. Research was also under way examining what was being taught in sexuality education programmes in schools. Within health services Māori and non-Māori providers described a range of programmes, including learning centres, peer education, education classes for schools, and antenatal classes and life skills training for teenage mothers. Programmes for young Māori mothers were culturally based. Residential programmes for mothers provided a raft of skills modules related to parenting (including modules for fathers), as well as supporting teenage mothers through education and decision making. All of the providers we spoke with highlighted the importance of evaluation of their services. They expressed frustration, however, at the lack of funding available to conduct systematic evaluations. Where evaluations had been conducted, organisations had not been satisfied with the level of consultation and the methods used to evaluate their services.

Perceived Research Needs

We asked research participants about what research they considered was needed to address sexual health issues for young people. Their responses were diverse and could be grouped into six broad themes: sexuality education, perceptions and understandings of sexuality, services, teen parenting, sexual abuse and homosexuality.

Most of the responses related to the first three categories. The responses advocating research into sexuality education included evaluation of the programmes in schools to identify whether students' needs were being met; investigation of safe sex awareness, knowledge and practice; and the knowledge–practice gap for uptake of safe sex education. Participants also suggested investigating adolescents' experiences of talking to parents, especially fathers, about sex.

The largest category of responses addressed perceptions and understandings of sexuality, with every participant identifying the need for more research on young men's views of sexuality, sexual health and pregnancy. A good number also mentioned the need to include those frequently marginalised in mainstream research, such as rural youth, minority populations and refugee communities. Others identified the need for research into how young people negotiate sexual relationships and risk taking; experimentation and exploration of non-coital sex; whether commonplace notions of teen sexuality (as hedonistic, pleasure seeking and lacking in love and intimacy) were how teens viewed themselves; and media portrayals of sexuality.

In the category of "services", research suggestions primarily focused on evaluations of sexual health clinics, parenting education and peer support programmes. Many participants identified the need for systematic follow-up of clients as part of the

evaluation process. Some also mentioned the need for research that could identify appropriate target groups for support and education services.

To summarise, interviews with key stakeholders revealed considerable knowledge about programmes and research being conducted across various organisations involved in the promotion of young people's sexual wellbeing. The scope of work being undertaken by the different service providers and educators was wide ranging and targeted diverse youth populations. Participants noted the need to target under-researched groups, such as young men, gay or bisexual young people, rural and unemployed youth, and young people in alternative education. Many of the topics implied qualitative approaches, research that would lead to understandings about experiences, perceptions and expectations. Evaluation of both sexuality education programmes and services was frequently mentioned. These identified gaps, framed as needs in the research interviews, bear a striking resemblance to the gaps found in the preceding review of the New Zealand research literature on young people's sexuality.

The following section draws the two sources of identified research needs together, and considers implications for a research agenda aimed at informing practices and programmes to improve young people's sexual health status.

ADDRESSING THE GAPS: FUTURE RESEARCH

The literature reviewed in this paper indicates that in some aspects of sexual and reproductive health we have very clear data, although it is weighted toward European, middle-class samples. However, substantially less clear are the explanations for the gap between what young people report they know about sex, STIs, pregnancy and safer sex, and the statistics that tell us that the 15–19-year-old age group show high rates of STIs and high rates of pregnancy.

Many of the stakeholders interviewed in the scoping study identified areas of research that would help to illuminate the relationship between knowledge and practice. As a starting point, it makes a great deal of sense to understand more about the youth populations with high proportions of at-risk young people: Māori youth, Pacific youth, rural youth and youth who drop out of school at an early age. Available research, on the whole, has not been conducted with these groups. Stakeholders also promoted the need for more research with young men to learn more about factors that might influence the use of safer, responsible sexual practices.

We need to find out what sources of knowledge these particular groups of young people draw on to make sense of sexual relationships, because this in itself may influence practices. For example, using pornography as a source of sexual knowledge constructs young women as sexual objects rather than sexual partners, each

construction having different implications for a sexual relationship. In the new millennium young people have a vast supply of sources from which to obtain sexual knowledge, many made available by new technologies, particularly the Internet. Currently, however, we do not know the status such sources of information have in informing young people's sexual knowledge and behaviour. We also need to know what information young people get from their families and how it is regarded in the context of other available sources of knowledge.

Sexuality education programmes provide another source of sexual knowledge, although Allen's (2001) work does point to the issue of young people possibly not valuing it as a source of knowledge. While evaluation of these programmes may be incorporated at the level of individual schools or individual providers, it is (as a number of participants pointed out) somewhat disturbing that no systematic evaluation research has been undertaken or built into the evaluation of the new health curriculum. Such evaluation should be high on a research agenda since education is regarded as a crucial aspect of lowering STIs and unwanted pregnancies. It seems highly likely that sexuality education approaches will need to be modified: perhaps in how they are delivered, who delivers them, when they are delivered and what is delivered. Effective evaluations should clarify the way forward for each of these.

The provision of sexual health services similarly lacks systematic research, yet indications from the New Zealand Family Planning Association's own research suggest on-site school clinics have made a dramatic impact on STI and pregnancy rates. Stakeholders identified a range of clinics outside of schools providing similar services for young people but, again, the effectiveness of these has not been systematically researched. Service providers and educators alike who participated in the scoping study uniformly called for evaluation research, which they could not conduct themselves because they did not have the resources to do so.

A research agenda to inform programmes that target the improvement of young people's sexual health also needs to address the different social contexts (for example, socio-economic, peers, family, rural, urban, ethnic) that young people inhabit. Indeed, the diversity and complexity of factors that influence sexual behaviour point to the futility of a "one size fits all" approach to young people's sexual health issues. In many regards, then, it would seem that we need to obtain more qualitative research data since the methodologies used in this type of research enable researchers to engage with the complexities of sexuality and sexual practices and to elaborate meanings and understandings that affect them. Such research would be particularly well suited to investigations of social, cultural and individual factors influencing sexuality and sexual behaviour.

By examining sexuality and sexual health issues in a more contextualised way, researchers may then begin to unpack apparent anomalies such as the reportedly high use of condoms alongside the high reported rates of STIs among 15–19-year-olds. There are, of course, much broader societal contexts such as the extent to which young people perceive having equitable access to opportunities and education in an "economically advantaged society", the way in which a society has prepared its young to meet increased sexualisation, and the openness with which sexuality issues are discussed from an early age (UNICEF 2001). While such societal factors may not constitute the direct target of a sexual health research agenda, they must always be considered the fabric though which individual accounts of sexuality and sexual practices are woven.

REFERENCES

Adolescent Health Research Group (2003) "New Zealand youth: A profile of their health and well-being" University of Auckland.

Allen, L. (2001) "Closing sex education's knowledge/practice gap: The reconceptualisation of young people's sexual knowledge" *Sex Education,* 1(2):109-122.

Andersson-Ellstromet, A., L. Forssman and I. Milsom (1995) "The relationship between knowledge about sexually transmitted diseases and actual sexual behaviour in a group of teenage girls" *Genitourinary Medicine,* 72:32-36.

Coggan, C.A., B. Disley, P. Patterson and R. Norton (1997) "Risk-taking behaviours in a sample of New Zealand adolescents" *Australian & New Zealand Journal of Public Health,* 21(5):455-461.

Collins, B. (2000) "Consistent or conflicting? Sexual health legislation and young people's rights in New Zealand" *Social Policy Journal of New Zealand,* 15:1-10.

Collins, B. (2002) "Young women's views and experiences of teenage pregnancy: Some social policy implications" paper presented at the Involve 2002 Conference, Wellington, July 2002.

Corwin, P., G. Abel, J.E. Wells, E. Coughlan, S. Bagshaw, M. Sutherland and L. Plumridge (2002) "*Chlamydia trachomatis* prevalence and sexual behaviour in Christchurch high school students" *New Zealand Medical Journal,* 115(1158):U107.

Davis, P. and R. Lay-Yee (1999) "Early sex and its behavioural consequences in New Zealand" *Journal of Sex Research,* 36(2):135.

Dickson, Nigel, Charlotte Paul and Peter Herbison (1993) "Adolescents, sexual behaviour and implications for an epidemic of HIV/AIDS among the young" *Genitourinary Medicine,* 69(2):133-140.

Dickson, Nigel, Charlotte Paul, Peter Herbison and Phil Silva (1998) "First sexual intercourse: Age, coercion, and later regrets reported by a birth cohort" *British Medical Journal (Clinical Research Ed.),* 316(7124):29-33.

Dickson, N., A. Sporle, C. Rimene and C. Paul (2000) "Pregnancies among New Zealand teenagers: Trends, current status and international comparisons" *New Zealand Medical Journal,* 113:241-245.

Duncan, D. and M. Betsy Bergen (1997) "Knowledge of New Zealand youth regarding sexuality and AIDS" *Journal of Sex and Marital Therapy,* 23(1):47.

Durex (2002) "Global Sex Survey" http://www.durex.com/index.html.

Durbin, M., R. DiClemente, D. Siegel, F. Krasnovsky, N. Lazarus and T. Camacho (1993) "Factors associated with multiple sex partners among junior high school students" *Journal of Adolescent Health Care,* 14:202-207.

Elliott, K.J. and A.J. Lambourn (1999) "Sex, drugs and alcohol: Two peer-led approaches in Tamaki Makaurau/Auckland, Aotearoa/New Zealand" *Journal of Adolescence,* 22(4):503-513.

Elliott, K.J., R. Dixon and V.A. Adair (1998) "Sexuality education in New Zealand: What adolescents are being taught and what they really want to know" *Set: Research Information for Teachers,* 1(article 3).

Fenwicke, R. and G. Purdie (2000) "The sexual activity of 654 fourth form Hawkes Bay students" *New Zealand Medical Journal,* 113(1121):460-464.

Fergusson, D. M., L.J. Horwood and M.T. Lynskey (1994) "The comorbidities of adolescent problem behaviours: A latent class" *Journal of Abnormal Child Psychology,* 22(3):339-354.

Fergusson, D.M., L.J. Horwood and M.T. Lynskey (1997) "Childhood sexual abuse, adolescent sexual behaviours and sexual revictimization" *Child Abuse & Neglect,* 21(8):789-803.

Fergusson, D. M., M.T. Lynskey and L.J. Horwood (1994) "AIDS knowledge and condom use in a birth cohort of 16 year olds" *New Zealand Medical Journal,* 107(990):480-483.

Flood, M. (2001) "Masculine understandings: Why young heterosexual men don't use condoms" Paper presented at Expanding Men's Interest in Reproductive Health Conference, Brisbane, October 8.

Gavey, N. and K. McPhillips (1997) "Women and the hereosexual transmission of HIV: Risks and prevention strategies" *Women and Health,* 25(2):41-64.

Hird, M. J. and S. Jackson (2001) "Where 'angels' and 'wusses' fear to tread: Sexual coercion in adolescent dating relationships" *Journal of Sociology,* 37(1):27.

Jackson, S.M., F. Cram and F.W. Seymour (2000) "Violence and sexual coercion in high school students' dating relationships" *Journal of Family Violence,* 15(1):23-36.

Jackson, S. (2001) "Happily never after: Young women's stories of abuse in heterosexual love relationships" *Feminism & Psychology,* 11(3):305-321.

Lungley, S., J. Parkin and A. Gray (1993) *Ways of Learning about Sexuality: A Study of New Zealand Adolescents' Sexual Knowledge, Attitudes and Behaviours,* Department of Health, Wellington.

Lynskey, M. T. and D.M. Fergusson (1993) "Sexual activity and contraceptive use amongst teenagers under the age of 15 years" *New Zealand Medical Journal*, 106(969):511-514.

Marsault, A., I. Poole, A. Dharmalingam, S. Hillcoat-Nallétamby, K. Johnstone, C. Cmith and M. George (1997) *Technical and methodological report: New Zealand Women: Family, employment and education survey*, Population Studies Centre, University of Waikato, Hamilton, New Zealand.

Ministry of Health (2001a) *Sexual and Reproductive Health Strategy*, Ministry of Health, Wellington.

Ministry of Health (2001b) "Sexually Transmitted Infections in 2000" *New Zealand Public Health Report*, 8(7):53

Nash, R. (2001a) "Sex and the school: The lessons of experience" *Social Work Review*, Winter: 27-32.

Nash, R. (2001b) "Teenage pregnancy: Barriers to an integrated model for policy research" *Social Policy Journal of New Zealand*, 17:200-213.

Paul, Charlotte, Julie Fitzjohn, Peter Herbison and Nigel Dickson (2000) "The determinants of sexual intercourse before age 16" *Journal of Adolescent Health*, 27(2):136-147.

Romans, S.E., J.L. Martin and E.M. Morris (1997) "Risk factors for adolescent pregnancy: How important is child sexual abuse? Otago Women's Health Study" *New Zealand Medical Journal*, 110(1037):30-33.

Seidman, S.N., W.D. Mosher and S.O. Aral (1994) "Predictors of high risk behavior in unmarried American women: adolescent environment as risk factor" *Journal of Adolescent Health*, 15:126-132.

Singh, S. and J.E. Darroch (2000) "Adolescent pregnancy and childbearing: Levels and trends in developed countries" *Family Planning Perspectives*, 32(1):14-23.

Statistics New Zealand (2001) *Demographic Trends*, Statistics New Zealand, Wellington.

Thompson, B., C. Fraser and D. Anderson (1993) "Some aspects of first sexual relationships in females with special reference to those aged under 16" *Health Education Journal*, 52:63-68.

UNICEF (2001) "Teenage births in rich nations" Innocenti Report Card No 3, UNICEF.

Wight, D. (1994) "Boys' thoughts and talk about sex in a working class locality of Glasgow" *The Sociological Review*, 42:703-737.

Woodward, L., D.M. Fergusson and L.J. Horwood (2001) "Risk factors and life processes associated with teenage pregnancy: Results of a prospective study from birth to 20 years" *Journal of Marriage and the Family*, 63(4):1170-1184.

Woodward, L., L.J. Horwood and D.M. Fergusson (2001) "Teenage pregnancy: Cause for concern" *New Zealand Medical Journal*, 114(1135):301-303.

Youngkin, E. (1995) "Sexually transmitted diseases: current and emerging concerns" *Journal of Obstetric, Gynecologic and Neonatal Nurses*, 24(8):743-58.