Report on a study to investigate the possibility of increasing access to health care for young people in Rural North Canterbury/ Waimakariri District

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Contents

Executive Summary 4

Introduction 5
- Aim 5
- Theoretical Framework 5
- Outline 6

Methodology 7
- Informed Consent 7
- Quantitative 7
- Qualitative 8

Results 8
- General Health 9
- Access to Health Care 10
- Physical Examination 10
  - BMI 10
  - Vision 10
  - Hearing 10
- Protective and Vulnerability Factors 11
  - Home 11
  - School 11
  - Community 12
  - Healthy Behaviours 12
  - Risky Behaviours 12
    - Cars 12
    - Substance Use 12
    - Sexual Behaviour 13
- Maori Students 14
- Risk and Resilience Factors Summary 14
- Mental Health 16

Nurse Referrals 17

Summary Revealed Health Needs 17

Services to meet the Revealed Health Needs 18

Results of Focus Groups 18
Student focus groups 18
Drivers 18
Barriers 21
Type of service 23
Nurse focus groups 24
Composite of Key People Interviews 26

Discussion 27

Recommendations 29

References 31

Tables

Table One: Age, Gender and Ethnicity 9

Table Two: Injuries 10

Table Three: Overall Risk and Resiliency Summary 15

Table Four: Mental Health 17

Executive Summary

The Rural Canterbury Primary Health Organization (RCPHO) made a commitment to improve access to health care for adolescents within its population area. They commissioned the Collaborative for Research and Training in Youth Health and Development Trust (The Collaborative), to investigate the health needs and suggest ways in which to meet those health needs to improve the health of adolescents.

A health survey of year 9 students in four high schools in rural North Canterbury was conducted by nurses especially commissioned for the research. The survey covered health issues, risk behaviours and asked questions to discover risk and resilience factors in the lives of the young people. In addition focus groups were conducted with a random sample of students from each school and with the nurses, to enhance the information gained from the survey.

The mental health of the students gave rise to the most concern with up to 20% of students with symptoms of low mood. General health was good with the most common health issues being asthma and skin conditions such as eczema and acne.

The biggest barrier to health care, for the young people, was lack of knowledge about how to access services on their own. In contrast 90% had been to the dentist within the last year, when parents were involved in taking them. The students had a large number of resiliency factors with good connections to family, and school. The main factors which could potentially put the students at risk of harm were bullying and the lack of membership of groups in the community and at school.

The students reported that the barriers to health care they experienced were lack of knowledge about where to go, not feeling heard, and issues around cost and confidentiality. The main factor that would assist access was a relationship of trust with a health professional. They suggested that if they were referred to other services by a health professional they trusted that would greatly assist access.

The nurses suggested that the health survey was an effective way to build a trusting relationship with the students, but needed time. This would need to be in addition to normal health services provided by the nurse.

Recommendations include a nurse in each school for at least two hours each day in the smaller schools and at least five hours each day in the larger schools, preferably full time. This was seen to be an effective way of facilitating access to health care, and potentially improve the health of the young people.

Introduction

Aim

Investigate the health status of young people, and consider what is required to meet revealed health needs with input from young people.

The Rural Canterbury Primary Health Organization (RCPHO) made a commitment to improve access to health care for adolescents within its population area. They proposed to work through the high schools and to start with Rangiora, Oxford, Kaiapoi and Akaroa. Their overall goal was to improve the health and well being of adolescents in the Waimakariri district.

The Collaborative undertook to research the health status of adolescents in the Waimakariri area in order to provide evidence of need and to also investigate what kind of services young people would see as appropriate to meet that need.

Theoretical Framework

The health of adolescents is characterised by the fact that they rarely suffer from disease. A small proportion do experience chronic illnesses such as asthma, and diabetes, and more and more children with congenital problems are now surviving to become adolescents such as those with congenital heart disease or cystic fibrosis. Another small proportion may develop cancer in this age group. The vast majority of problems in adolescence however could be said to stem from psychosocial behavioural issues such as unwanted pregnancy, sexually transmitted infections, motor vehicle accidents, alcohol and other drug use. Mental illness is also a major issue at this time and 80% of mental illness is said to have its beginning in this age group.[1] Many of the issues stem from the fact that development – particularly cognitive and sexual development is still occurring, and some would say that the final part of brain development does not finish until 25 years.

Much research has been focused on problem issues and risk behaviour. Some has examined the factors that make adolescents more vulnerable to harm. Since the 1970's there has been increasing research into factors that can protect adolescents from harm. Research has focused on factors that engender resilience or the ability to do well despite the presence of risk factors. [2,3,4,5]

This balance of risk and protective factors in the various areas of life that influence adolescent development – home and family, school, peers and community has been one of the major areas for research into adolescent health. It has been proposed that health outcomes are determined by behaviours, which are in turn determined by

biopsychosocial influences. One of the ways in which these influences can be assessed clinically has been through an assessment known as HEADSS which is a framework for screening adolescents for health and behavioural factors.[6] It has been proposed as a screening tool but is also helpful to engage adolescents in the therapeutic relationship and to help form a management plan together. It has not been verified as a research tool, although other schools such as the Aim HI group of schools in Auckland and Porirua, and another High School in Christchurch have amassed data using it. Other tools have been developed in research and have been used in studies such as the AddHealth study, and the New Zealand Youth 2000 and 2007 study. Both these tools are long and have worked well in computerized form, but are difficult to use in a pencil and paper setting.

The tool that was used in this investigation was one based on the survey used in the Aim Hi schools. The reason for this was that it has already been shown to be helpful, and in addition it might be possible to compare the health status of rural Canterbury young people with that of students in South Auckland. Focus groups with students were undertaken to find out what they thought were the ingredients of a good health service. A focus group with the nurses who performed the survey was also helpful to inform how services could be delivered in the future.

Outline of the Report

This report will outline the methodology used, ethical issues arising, physical health status, emotional and mental health status, factors that make young people more vulnerable to harm and those which protect from harm. The results of the focus groups will then be presented to inform the design of any service that could be set up to meet the revealed health needs.

Where gender or ethnicity was found to make a difference in these factors then they will be reported. In many cases gender or ethnicity had no significant effect. The report will use aggregated results from all schools. Individual schools will be able to access their own anonymised results but other schools will only have access to the overall report. All the themes reported on from the qualitative part of the study were fed back to the groups for checking before being included in the report.

Methodology

Informed Consent

Ethical consent to perform the study was obtained from the Canterbury District ethics committee. Each school was approached via the Principal and a “health” contact was made in each school to help co-ordinate the study. A letter informing parents of the study was sent to each parent of year 9 students in all four schools. Parents were asked to send back a form indicating whether they gave permission for their child to take part or not. In addition all parents were invited to a meeting held in their school in the evening to inform them of the study. Present at the meeting were the investigator, the nurse involved and the health co-ordinator for the school. In one of the schools reminder phone calls were made to parents who had not returned their consent forms. In some of the schools in which parents did not return a form the consent was taken from the student alone.

Quantitative Study

One of the schools had a nurse already working for them for 10 hours a week. In the remaining three schools there was either no health service or one provided by visiting health professionals. In these schools a nurse was appointed on contract to carry out the survey. A total of three nurses were employed. There were two area schools involved in the study and two slightly larger schools, which were also nearer to the city. One of the area schools was so small that the school requested we also interview their year 10 students.

The RCPHO provided a project co-ordinator who put a lot of work into the initial set up, negotiating with the schools, talking to the local iwi ensuring cultural appropriateness, and employing the nurses. The project co-ordinator also formed key contacts in each school that helped to integrate the study into the school routine and enabled it to flow smoothly. The partnership between the Collaborative and the RCPHO worked well in this respect.

Before the study took place a letter was sent out to all ancillary health services in the area to inform them of the study. This was done in anticipation of an increased number of referrals to services such as the dentist, mental health, vision and hearing services. A list of services that schools could use for referral for any difficulties uncovered by the nurses was drawn up and local GPs were also informed by a presentation at one of their weekly meetings.

The nurses undertook two days of training in the principles of youth development, the use of the HEADS assessment and the skills of communication with young people.

The survey was carried out in the final term of 2007. The survey comprised an interview between the school nurse and the student, during which the nurse completed the survey form. An hour was allowed for each interview. In addition some time was needed for follow up and completion of the study form. Where there were clinical issues that needed follow up the nurse kept a separate record in the student's health file. The study interview forms were couriered to the investigator in batches and the information was entered into an Excel spread sheet for analysis.

Qualitative Study

A researcher with experience in running focus groups undertook the qualitative part of the study. In each school the consent forms were reviewed for those who had consented to take part in a focus group. From this list of students 8 were selected from each school. The selection had no criteria other than to ensure a gender balance. These students were invited to take part in a focus group, which lasted one hour. There were four focus groups in total, one in each school. The researcher used a question guide with prompts pre scripted for each group. The session was recorded, and a note taker also took notes. The recordings were transcribed and then examined looking for emerging themes. This thematic analysis was then fed back to each group to ensure the views recorded were verified by the participants. In addition to the focus groups with the students, a focus group was also conducted with the nurses to obtain their feedback about the interview process and their views on a future nurse led health service in the schools. Similar methodology was used with the nurses. Interviews were also held with the health contacts in each school.

Results

There were 538 students on the roll of the year 9 students in the four schools. This number also included ten students from year 10 of one of the area schools. One class could not be interviewed as time ran out before the end of the term. 125 students or their parents did not give their consent. One record was not numbered, and three were incomplete as the students were not able to answer all the questions. This left 359 records that were analysed. There were approximately equal numbers of boys and girls and ethnicity was fairly evenly balanced between genders (Table One)

Table One

Age, Gender and Ethnicity

	Male (168)	**Female (191)**
Age	14-15	14-15
Ethnicity [1]	80% European (134) 18% Maori (31) 10% other European 13% Other	72% European (138) 13% Maori (26) 10% Other European 17% Other

[1] students were allowed to tick more than one ethnicity

General Health

The results were collated from the survey. The information was all based on the students self report to the nurse interviewers. On the whole the students felt they were healthy. Asthma and skin disease caused the most problems with 16% of boys and 21% of girls with asthma and 18% of boys and 31% of girls with skin problems including eczema and acne. 30% of boys and girls complained of recurrent headaches. 85% of the girls had started their period. The students had quite a good knowledge of history of illness in their families with the "don't know" response to questions ranging from 10-30%. Girls knew more than boys. Asthma was the commonest disease in families followed by diabetes.

Allergies were common with 46% of boys and 49% of girls saying that they had an allergy – this was mainly to pollens, dust and some foods. 22% of boys and 37% of girls were on a medication, which was commonly an inhaler or skin creams.

Injuries were also common. (see Table Two) with some differences between boys and girls in that slightly more boys than girls were involved in motor vehicle accidents and in injuries from fights. Interestingly just as many girls as boys experienced sports injuries.

Table Two Injuries since started school

Injury	Boys n	Boys %	Girls n	Girls %
Falls	87	52	106	55.5
Burns	38	23	42	22
Sports injuries	101	60	118	62
Motor Vehicle Accident	30	18	22	11.5
Poisoned	8	5	27	14
Assault/punching/fighting	27	16	18	9

Access to health services

The first point of call for 98% of the students when they were sick was a family member. About 70% said there were barriers to health services in school, most commonly this was because they did not know about the school services with only 40% of boys and 62% of girls knowing that they existed. Embarrassment and not knowing how to access the school services were other common reasons given. 80% of the young people said that they saw the same doctor each time they went but only 13% of boys and 23% girls had been to the doctor within the past 12 months. Barriers to health care in the community were identified by 16% of boys and 26% of girls. The most common reasons for girls were – costs too much (6%) and couldn't get an appointment (4%), having no transport and being scared of what the doctor might say were also recorded by about 3-4%. For boys the barriers were slightly different the cost (3.5%) again and couldn't be bothered (3.5%) were the two commonest barriers.

These young people did visit the dentist. Over 92% had been to a dentist and for nearly 40% this had been within the last 6 months, with only10% saying that it had been more than a year ago. Seven % of the boys and 12% of the girls had an illness that they needed to see a doctor regularly for, nearly half had been in hospital but only about 10% were being seen in an outpatient clinic.

This group of young people were well covered with vaccinations: 87% of both boys and girls had had meningococcal and tetanus vaccinations, and over 80% said that they thought they had had their childhood vaccinations.

Physical Examination

BMI – A healthy BMI (weight/height ratio) lies between 18 and 25: 11(6.5%) males and 24 (12.5%) females had a BMI of over 25 and 40 (24%) males and 34 (18%) females had one of under 18, 3 (1.5%)of the girls and 5 (3%) of the boys had a BMI of over 30.

Vision Nine of the 168 boys(5%) either had glasses or had regular checks with an optician. The majority had good sight 5/6 or 6/6 vision using a Snells optical chart; 35 (21%) of the boys had either 9/6 or 12/6 in one or other eye, ie worse than optimal vision. Eight (4%) of the girls wore glasses or had regular optician visits, 1 had an eye infection and 1 declined to be tested. 40 of the 191 (21%) girls had worse than 6/6 or 5/6 vision. Six students were referred for further testing.

Hearing Eight (4.7%) boys missed more than one beep on testing with mobile screening testers supplied by Bay Audiology, as did 11 (5.7%) of the girls. One of the girls declined to be tested and one had blocked sinuses and failed completely. Nine students were referred for further screening.

Blood Pressure was within normal range for all the students.

Factors affecting vulnerability to and protection from events harmful to development

Home. Students were asked who lived with them at home. There were approximately 6-10 students who lived equally between two homes. Approximately 90% lived with their mother but approximately 40% did not have a birth father living at home. About 50% had a brother or sister living with them and about 13% had a stepfather. The average number of people the students lived with was three with a range of just one other person living with them to eight. 74 males and 79 females lived with four or more people at home, and 31 males and 33 females lived with less than three people.

Most of the students felt they had someone to talk to at home (86% of boys and 92% girls), and most felt that their mother and father cared for them and they spent enough time with them most of the time. Girls felt that they had less time with their mother or father than they would like than boys. 90% of boys and 96% of girls had jobs that they had to do around the home.

Most of the young people felt safe at home (98%), however, just over 50% had been hit or physically harmed in the preceding 12 months, and 20% of boys and 16% girls had been hit two to three times. In terms of witnessing violence about 70% had witnessed verbal violence; and10% had witnessed physical violence in the home in the previous 12 months.

School. Students did not seem to be quite as well connected to school. 86% were happy with the choice of school, 83% felt safe at school all or most of the time, but only 42% of the boys and 38% of the girls felt the teachers cared about them a lot; most felt that teachers cared about them somewhat. 12 (7%) of the boys and five (2.6%) of the girls had been suspended with four of those girls being suspended more than once. 20% of the boys and 24% of the girls had skipped class and 26% of the boys and 23% of the girls had been bullied. Most said they had someone to talk to, who was the form teacher, counsellor, or dean.

Community. 44% of boys and 34% of girls had a job after school. The kinds of jobs ranged from helping "Dad with his jobs at work", through babysitting, paper rounds, gardening, and helping on the farm, to cleaning and working in the local dairy. Participation in activities was quite high with 61 % of boys and 67% girls involved in school based activities of a cultural or sporting kind and 75% of boys and 68% of girls being part of a group in the community such as a sports club, youth group, St John's etc, however 61% of the students said that spiritual beliefs were not important to them.

Healthy behaviours.

65% of boys and 58% of girls played sport on most days with a further 20% playing at least once a week. Most students (86%) ate three meals a day most of the time. 94% of boys and 82% of girls usually ate meat, over 80% usually ate vegetables but only 64% of boys said they ate fruit, (84% girls). Almost half of the students said they drank water the most. 14% of young people spent more than three hours a day in screen based activity. 10 students spent four hours or more watching TV a day, but most watched two hours or less. Access to the internet was much more restricted with 56% of students using it for 1/2 hr or less and 22 (7%) students having no access to the internet outside of school.

85% of the boys and 77% of the girls said they were happy with their weight.

Risk Behaviours.

a) Cars. The vast majority of students wore a seat belt in a car with only eleven students saying that they only wore them sometimes or hardly ever. 33% of boys and 35% of girls had ridden in a car with a driver who had been drinking alcohol, one or more times in the last month.

b) Substance Use. The rates of smoking cannabis and nicotine were similar in both boys and girls. Nicotine use was found in 12% of boys and 13% of girls and cannabis use was found in 11.9% of boys and 11.5% girls. Alcohol use was higher with 60% of boys

and 48% of girls who said they drank alcohol. 11% of the boys said that they drank alcohol to fit in whereas this was admitted to by only 6% of the girls. Of the students who used alcohol 39% of the boys and 26% of the girls claimed that they had not experienced problems and for the rest problems ranged from getting into trouble, forgetting what they had done and getting into fights. 2% of girls said that they had had sex with someone and later regretted it because of alcohol

Of the 42 students who said that they had tried cannabis 54% (23) reported no problems associated with their cannabis use. The problems reported included problems with memory, arguments with the family, being in trouble with the police and doing something that they normally wouldn't do. Eleven students had tried sniffing solvents of some sort; two had tried stimulants and one hallucinogens. Only two of the students who had tried these other drugs were boys. When asked if they had ever felt unsafe around someone who had been using alcohol or other drugs 24% of both the boys and the girls said yes.

c) Sexual Behaviour. Thirty-six students (10%) said they had had sex. Most of these had had more than one partner, 11 (64%) of the boys and 12 (63%) of the girls said that they had had two or more partners. Of the 17 boys 13 said they either wanted or very much wanted it and four didn't mind. In terms of condom use 13 said they always used a condom and two most of the time; three said it didn't apply to them, and one said he had never used one. For girls it was a little different. Of the 19 girls who said they had sex, 11 said it was wanted or very much wanted, four didn't mind but three said it was unwanted or very unwanted. When it came to condom use five said it didn't apply to them and one never used them; 14 used them always or most of the time and two some of the time. Of the boys 95% had thought about sex and 91% of the girls, however, none of the boys said they had been sexually attracted to the same sex, but six of the girls said they had.

Maori students

Maori students had similar physical health issues to Europeans, although a few more said that they thought they needed to see a doctor regularly (19% of boys and 20% of girls cf 10% of European boys and 13% of girls), and 54 % of both boys and girls had been in hospital, which was similar for European students. Health issues were similar with the most common use of medication for asthma, and one on treatment for type 2 diabetes. BMI, hearing and vision were similar to European results.

Risk and resiliency factors for Maori students were again very similar to the majority. More students were living with more than five other people and their feeling of connection to both home and school were similar. The rate of skipping school was

similar but there was a marked difference in the rate of suspension 10% for the total boys and 22.5% for Maori boys and 5% versus 15% for Maori girls.

Some risk behaviours were different. 72% of Maori students said that they thought someone in their family smoked nicotine or cannabis compared to 44% of all students. To a certain extent this was reflected in the numbers of students who said they smoked although it was only Maori girls who smoked more (23% cf 12.5% girls 13% of Maori boys cf 12.5%). Slightly more Maori students smoked cannabis than the total (19%v 11%). 68% of Maori boys and 65% of girls said they drank alcohol compared with 60% and 48% of the total boys and girls. Maori students had slightly higher rates of sexual behaviours with six (19%) of the boys and four (15%) of the girls, having had sexual intercourse; three of the boys and three of the girls had had more than one partner. None of the Maori girls said that they had had an experience of sex that was unwanted. Condom use was very similar to all students.

Summary Risk and Resiliency Factors

From the overall look at factors that make students more vulnerable to harm and those that protect them from harm (Table 4), it can be seen that the majority of students were well protected. The main factors that caused some concern with these students, were bullying and the fact that only 60-70% were connected to a group of any kind.

Table 3 Overall Risk and Resiliency summary

Risk / Vulnerability Factor	Boys	% Boys	Girls	% Girls
Moving a lot	22	13.10%	20	10.47%
Friends or family members who have attempted suicide	12	7.14%	31	16.23%
Witnessing or exposed to family violence	16	9.52%	18	9.42%
Parent with a mental illness or in prison	7	4.17%	25	13.09%
Experiences bullying at school	38	22.62%	33	17.28%
Skips classes	31	18.45%	29	15.18%
Feels is picked on by teachers	10	5.95%	11	5.76%
Doesn't belong to any group activities	40	23.81%	41	21.47%
Non-heterosexual orientation Sexual abuse	1	0.60%	3	1.57%
Anxiety problems	11	6.55%	15	7.85%
Behavioural problems	24	14.29%	15	7.85%
Substance abuse	21	12.50%	25	13.09%

Resiliency / Protective Factor	Boys	% Boys	Girls	% Girls
At least one parent (or person who acts as one) who cares a lot about them	153	91.07%	174	91.10%
No family illness	130	77.38%	138	72.25%
Each week gets to spend enough time with at least one parent (or persons acting as a parent)	148	88.10%	167	87.43%
Other family members care a lot about them	151	89.88%	170	89.01%
Feel safe at school	140	83.33%	166	86.91%
Feel part of school	148	88.10%	166	86.91%

Feel teachers are fair	148	88.10%	170	89.01%
Feel that adults at school care about them	155	92.26%	174	91.10%
Sexually safe, uses condoms mostly <2 partners	150	89.29%	175	91.62%
Feel safe in their neighbourhood	159	94.64%	180	94.24%
Feels hope for their future	156	92.86%	175	91.62%
Cultural connections-youth, culture, sports	114	67.86%	140	73.30%

Mental Health

The mental health of the students was of some concern: only 46 of the girls (24%) and 43 of the boys (25%) said they felt about a seven out of 10 most of the time (10 being very happy and one very sad); girls seemed to suffer low feelings more than boys. When asked if they ran into tough times during the next year whether they believed they could make it through 94% (77% Maori boys) of the boys said yes but only 87% (85% Maori) of the girls said yes with 12% saying maybe and one student feeling that she felt she would not make it. There were similar differences in angry or sad feelings and thoughts of self-harm. See Table 3. When asked if they knew of anyone who had killed themselves including anyone in the family 10.7% of the boys said yes and 22.5% of the girls. 7% of the boys and 14% of the girls thought that they had a mental health disorder but were not quite sure why. This contrasted with those who had said that someone in their family had depression or another form of mental illness: 12.5% of the boys and 26% of the girls. Girls seemed to know more about school health services in general (60% v 40% of the boys), and also more about the availability of the school counsellor than the boys (83% v 65% of the boys). The majority of students said they would talk to someone in their family (mothers were especially mentioned) or friends if they felt worried about something. 5% said they would go to a counsellor as a back-up. Of the students that said that they had lived through recent stressors, these ranged from the death or illness of grandparents, and fathers, through friends or pets dying, to being in trouble at school for the first time and exams. Moving house or countries was a fairly frequent stressor as was parents splitting up. Maori young people seemed to have similar mental health issues to European and in some instances were slightly better, although Maori boys did not seem to fare as well as European boys, with more of them saying they were angry or sad for more than 2weeks.

Table 4 Mental Health

In the last 12 months	Boys n	Boys %	Girls n	Girls %	Maori boys % (n=31)	Maori girls % (n=26)
Angry every day for 2 weeks	17	10%	35	18%	22.5%	23%
Sad every day for 2 weeks	11	6.5%	43	22.5%	13%	19%
Yes to thoughts about killing self	8	5%	19	10%	3% (1)	7% (2)
Plan to kill self	1	0.6%	8	4.2%	0	3% (1)
Tried to kill self	0	0	5	2.5%	0	3% (1)
Thoughts about self-harm	8	5%	37	19%	3% (1)	11% (3)
Have self-harmed	5	3%	32	17%	0	11% (3)
Noticed mood change lately	96	57%	114	60%	64.5%(20)	50% (13)
Recent stressors	37	22%	61	32%	16% (5)	27% (7)

Nurse Referrals

In addition to the referrals for further hearing and vision testing four students were referred to counsellors, including one to the brief intervention service that the PHO provides. Referrals were also made to a doctor (two) and to the nutrition department at Community Public Health (one). Contacting the parents with information about where to take their young person facilitated most of these referrals.

Summary Revealed Health Needs

The students in rural North Canterbury that took part in this study were healthy. The most common chronic illnesses were asthma and eczema, and there was quite a high prevalence of accidental injuries with over 50% of students being involved in falls and sports injuries. There weren't any major problems with weight, vision or hearing. They were on the whole well connected with home and school, but some of the

mental health issues and risk behaviours leave room for intervention. Sexual activity was limited to 10% of students but an alarming 65% of these reported more than one partner. Many of the girls had low mood and thoughts of self-harm, which should really be followed up. The mental health of Maori boys was also cause for concern. Use of both cannabis and alcohol was also relatively high for students about to enter year 10. Bullying could be put forward as a significant health issue. There was little difference between the health needs of Maori young people and European.

Access to health care was mostly limited by lack of knowledge of services, but also cost, fear of embarrassment, lack of transport, and concerns around confidentiality.

Services to meet the Revealed Health Needs

Results of Focus Groups

1) **Student focus groups**

Focus groups helped us to explore in-depth, the perceptions of the young people about health issues that affect them. They also helped us to explore their perceptions of current health services, what makes them decide whether to use those services or not, who helps shape those decisions and how an effective health service might be designed for them.

The main focus of the questions was to identify both ‘drivers’ and ‘barriers’ involved in their decision making processes and choices about whether they would use a health service or not. To help design an effective youth health service in the schools, we first need to understand what makes a young person more likely to use a health service and what would make them less likely to use one. An effective way to do this was to use focus groups to explore their perceptions of existing health services and how these perceptions shape their decision making, when deciding whether to use a health service or not.

Drivers

The most significant issue to emerge for the students was the nature of the relationship that developed between themselves and the health practitioner. The young people placed greater importance on the type of person that they saw when using a health service, over the type of service per se, such as the building or how the waiting room was designed. The young people said that they were most likely to judge the effectiveness of a service on their experience with the person that they had seen. What was most important for them was whether:

- They felt that they had been heard
- The person genuinely cared about what they said
- They were given good practical advice and choices
- They felt that their confidentiality would be kept
- They felt that they could trust the person
- They felt that the person was being authentic with them

When asked where they would take a friend who was in trouble, the majority of young people said, to a person that they had a relationship with and they trusted, such as a youth worker or parent. The reputation of the person or service had a significant effect on whether they were considered trustworthy. Most young people did not feel that they could make an appointment with a doctor by themselves or with a friend. For advice about issues such as pregnancy, sexual health or contraceptive advice, a number of young people identified the school nurse, but the majority of them did not say or know where they would go.

When asked what was good about existing health services (in schools where there was one) they said:

- Could turn up and the service was welcoming and open
- Felt that confidentiality would be kept
- It was easy to access; get hold of someone, and to find
- Felt had been helped

Confidentiality and whether they felt they could trust the person they were talking to were most important, followed by how welcome they felt.

A significant theme was the importance they placed on not feeling 'fobbed off' or rejected when relating to the health practitioner. Whether they felt this way or not, was influenced by the practitioner's body language, tone of voice, eye contact, attention, and the time available.

They identified a good experience as:

- Body language – attentive, welcoming and open.
- Tone of voice – interested and caring, but not over bearing
- Eye contact – good eye contact, but not too intense.
- Attention – genuine attention to what they were saying was given; they weren't doing something else such as writing or conveying impatience.
- Time available – to hear their whole story without interrupting or assuming too quickly what the young person needed help with.

Participants said, they wanted a person who was,

> *"nodding and interested that sort of thing. They listen to the whole story…. they give good advice and options. They are respectful and respect your wishes."*
>
> *"so they are not hard core staring at you and they are not folding their arms or leaning back…..so body language matters. And they reply to what you say, instead of just going Umm."*

When asked what type of person they would like to see they said they wanted someone who was:

- Nice
- Who they could relate to
- Who is able to use humour, but be serious when they needed to be
- Who is able to show that they understand
- When asked what type of advice they would like, the majority of young people said, good practical advice that gave them choices on how they could resolve their issue.

For many of them, what was important was that advice was given. They want to talk to someone who is responsive, not just reflective. Almost all of the participants commented on how much they disliked being asked 'how do you feel about that' and 'what do you think you should do about your problem'; they said they wanted more than this. Participants said:

- "If they say well 'how do you feel about that' after you have talked then you are like well you haven't been listening have you coz I just told you!"
- "Because it's like I've actually come to you for advice and they are getting me to do their job for them."
- "Because if you go to a counsellor they always say 'what do you think is the problem' and you are sitting there thinking, I came to you for advice."
- "What we want is that they listen to the whole story and they give you good options".

- "Somebody who is able to like listen and actually care about it. And like not interrupt what you are saying. And actually give you advice, not like the people that go and how do you feel about this".

While they identified as being sensitive to someone telling them what to do, this did not mean they didn't want advice, just that they wanted it to be non judgemental. They said:

- "What we want is good advice and different choices that you can follow or otherwise you feel like you have no say in the matter".

A number of the participants also said they did not like practitioners making assumptions about why they were there or what they were saying. This included not assuming their issue had to be a major problem or about sex or drugs and alcohol etc, just because they were a young person. They said:

- "You want to tell them what you want to talk to them about; you don't want them to automatically expect you to have the biggest issue on earth to talk about, like everyone's pregnant or something"
- "You can tell them what you want to talk about, and not feel like your problem isn't big enough and they will think you are making a big deal out of nothing, but if you do have a big problem to talk about you can do that too – we just don't want them to assume"
- "They jump to conclusions and it's completely the wrong conclusion, they just need to let me get to the point"
- "They tell you what they think the problem is, and don't listen."

What was most important was that a genuine attempt was made to listen to and understand what they wanted to say, whether it was for a serious issue or not.

When asked what was the most important way that they found out about a service; they said, by what their friends said about it. They believed that 'word of mouth' would be the biggest determinate of whether the service was used or not.

Barriers

Their knowledge of health services that were part of the school depended on the range of services already in place, although the majority were not overly aware of

current services. While a number of young people said they had had positive experiences using health services such as a medical centre, they also identified barriers such as:

- Not feeling heard and listened to by health professionals.
- It costs money or they did not know how much money it would cost.
- How they were greeted when they got there – if they felt that the person at the desk disapproved of them being there, or they did not feel welcome.
- Worries about confidentiality, especially in a smaller rural community 'where everyone knows everyone else'.

Some participants also believed the way a youth health service was advertised could create a barrier to the service, for young people. This was because they thought advertising that was too serious or intense might imply that the service was only for people with 'serious' or 'major' issues. They also acknowledged that the service would still need to be advertised in a way that didn't place a barrier for young people who did have more serious issues. One participant suggested that the advertising concentrate on how the service was able to help, no matter what your issue was, such as advertising it as a 'helping hand'.

How they were greeted when they arrived at the health service also had an impact on whether they thought they were welcome and would go back. They said that they wanted to be greeted in a way that made them feel welcomed and accepted at the service, just like anyone else would be.

One student said they didn't like it when the receptionist acted:

> *"like you are just a pain to deal with because you are a young person".*

They also said it was good if the person who greeted them showed them where to go.

The majority of students expressed concern about the issue of privacy when asked about whether they would use a school health clinic – this came from both students using existing clinics and those at schools were one might be developed. A common concern was that people would see them going to the clinic during class breaks and ask why they were going or if they had to leave class to go – everyone would know where they were going. While it was not an overwhelming problem, in schools with existing health clinics some students had already had some negative experiences accessing the health clinic, because of issues such as this.

When asked about non school based health clinics, many of the same issues arose, very few of the young people believed that a health clinic attached to a youth centre would be successful, because of privacy issues. They believed young people would not use the service, because they would be concerned that other young people at the centre would see them going to the clinic and ask them about it.

Type of Service

When asked what type of service they would like, the majority of young people said, one that gave good practical advice that gave them choices on how they could resolve their issue. For many of them, what was important was that advice was given. They wanted to talk to someone who was responsive, not just reflective. Almost all of the participants commented on how much they disliked being asked 'how do you feel about that' and 'what do you think you should do about your problem'; they said they wanted more than just this. A number of the participants also said they did not like practitioners making assumptions about why they were there or what they were saying. This included not assuming their issue had to be a major problem or about sex or drugs and alcohol etc, just because they were a young person.

When asked what was the most important way that they found out about a service? They said, by what their friends said about it. They believed that 'word of mouth' would be the biggest determinate of whether the service was used or not.

When it came to referrals students felt that they would feel bad about being referred if they were being "fobbed off" or if they felt that their problem was seen as being so serious they needed a referral. The participants identified ways that the practitioner could mitigate against this by doing things such as:

- Reassuring the young person that they knew and trusted the person they were referring them too,
- Reassuring them that it was not because they were 'weird' or their problems were too hard
- Explaining why they were referring them to someone else.

They also said that it would be important that the young person knew that they could go back to the practitioner if they did not 'like' or feel comfortable with the person they were referred to.

The amount of information they were given and how it was conveyed was also an issue for some participants. For instance, they preferred one pamphlet with the basics of what they needed to know, as they did not like having to take lots of pamphlets with them. They also said they did not want too much information that used too much

scientific jargon. One student said she didn't like too much jargon because if she did not understand it she felt she could not go back and ask, because they might think she was 'stupid'.

2) Nurse Focus Group

Overall the nurses felt that the project was worthwhile and very rewarding. For most of them it was a difficult balance between their clinical role and their research role. The nurses were asked to carry out a survey, but they also had an ethical and clinical responsibility to try to help deal with some of the issues that were raised by the young people, which meant referral on to other practitioners which was often time consuming. The time that the process took was one of the more difficult issues. There were some frustrations around not having a room to use (in the schools that didn't have a health area), and also that they often collected more information than the survey required and they weren't sure what to do with it.

The most valuable part of the project for them was the relationship building with the young people and the way in which it raised the profile of what was already available in the school. They said:

"'a surprising number of young people did not know how or where to access help"

An important issue to emerge was the need for the support of the school staff from the top down. The support of admin staff was vital and the counselling and pastoral care staff. Where there was an acknowledgement by the school that the link between health and learning was important the process went smoothly. In schools where that was not acknowledged there were more difficulties.

They believed that 'word of mouth' would be the biggest determinate of whether the service was used or not. They found that more students agreed to take part in the surveys, after they had heard about it from their friends. Therefore, they said the type of person employed and how they worked with the young people, would have a significant impact on the effectiveness of a service developed. One nurse underpinned the importance of this by saying that:

> "if you had the wrong person in the job you would lose the whole school".

Because of the importance of this, the nurses highlighted the need to have adequate support for the health practitioner so that they were able to maintain a good standard

of work with the young people. From this perspective having more than one person available for the young people to see would be important, as 'everyone has a bad day' and someone would need to be available if the nurse was sick or on leave. This would also be important because availability and continuity in being able to access help were important issues for the young people.

The nurses felt that the resources they needed were not vast but a designated health area would be important, knowledge of school systems, linking in with administration staff so that appointments and running access to the nurse is as smooth as possible. In addition outside supervision and collegial support would be very important. Time was the most important resource not only to be able to see students and do a thorough screening at the beginning but also to network with colleagues both within and outside the school. They felt that continuity of care was important and the nurses who were only there to carry out the survey felt frustrated that they would not be able to follow up with the students on the issues that they had raised.

The nurses were surprised that the students were so willing to tell their stories:

"More students agreed to take part in the survey once it had started "because they heard that there was someone there that will listen to them".

"It was because they wanted to talk. That is what I found really surprising, they really opened up. There were not many that did not want to tell you anything. Because they knew it was confidential which was great. They were happy to be listened to".

"For young people, if they knew it was their choice not to answer the question then they were more likely to answer it."

The recommendation from the nurses for the future would be to have a school nurse in each school full time (8am-4pm) in the bigger schools and half time in the smaller ones. A health area with a waiting room would be ideal:

"Students coming to the clinic need it to feel confidential and secure, they need to be able to be somewhere while they are waiting".

They felt that they needed time to be able to see students on a drop in basis, to screen all year 9 students at the beginning of the year on an appointment basis, meet with staff, meet with colleagues, and have supervision. Time to follow up students and to make referrals was also seen to be vital. The main issues they needed to refer students on for were drug and alcohol problems, mental health problems (particularly stress related mental health issues), and hearing, vision and raised blood sugar. They felt that there were places to refer people but often there was a long wait and this

was not helpful. In the future they felt that the survey of year 9 students would be an important tool to use to both discover what the issues are that need dealing with for the students, and also to engage the student in using the full services the school has to offer. The survey tool would need to be adapted to better suit a clinical use as opposed to a research use.

Overall, with more time, the nurses felt that they could make an important contribution to the school by seeing the students and helping them to learn better by helping with their health issues but also they could do some health promotion and even contribute to the health education of the students.

3) Composite of Key People Interviews

A key person was appointed in each school by the RCPHO liaison person, who acted as a link between the researchers and the school. This helped the implementation of the study, as they were able to provide a smooth passage for its organisation into the routine of each individual school.

Different sorts of people were key; in two schools this was the deputy principle in another it was the school counsellor, and the fourth the health teaching co-ordinator. They were interviewed after the study was carried out, and were asked about what they felt were the most important issues young people faced and the best ways the school should help with these.

They felt the biggest problems that they were dealing with for young people were family issues, peer relationships, and bullying. They felt students needed advice about sexual health, but they felt that mental health issues were most important.

They felt that there were not enough support services to refer young people to if they needed them, especially in the smallest schools. Mental health services were felt to be most needed but also help for parents.

Feed back from the young people about the surveys ranged from very keen to do them to no feedback at all. There was no negative feedback. The logistics of the survey seemed to have gone smoothly with both staff and students feeling well informed. In addition all felt that it would be very beneficial to repeat the study with year 9 students every year. They felt that it would be a good time to address issues just as they were emerging and that students liked the opportunity to talk. The all felt that more staff time would be needed

The key people in the schools were aware of the confidentiality that surrounded the interviews in the study and the nurses were also aware that confidentiality was really important to students. They felt it would be helpful if the school clinic were slightly separate from school buildings. Sometimes there was difficulty with parents wanting to know results from the survey and not understanding the need for confidentiality Schools appreciated being alerted to specific issues for students that they can help with.

All the school contact people felt that they could use a school nurse full time or at least every day for some part of the day. Use in health education in addition to a clinical role was suggested. It would be very helpful if they were able to provide some mental health service as well, especially in schools with no counsellor. One school suggested that parents should be able to visit the school nurse as well.

Akaroa Area School was particularly keen to emphasise their need for health resources in the school. In particular they expressed a need for accessible mental health services, as they observed that there are minimal services for young people in the area.

Discussion

Whilst there is a lack of systematic reviews about the effectiveness of comprehensive school health services, there is evidence that they increase access to health care [7,8], increase the use of other services, and may improve both mental and physical health status [9,10] The students who took part in this study were clear that the nature of the relationship between the adolescent and the health practitioner was the most important factor in determining access to health care.

The advantage of employing nurses to undertake the health survey is that they can explain the questions to the students; however the disadvantage can be that the students may find it difficult to answer some questions accurately and may be tempted to exaggerate or underplay responses. When the survey is used as a tool to engage the students in the school health care system then it is vital for it to be undertaken by the nurse. One of the major issues to emerge from the qualitative research was the need for a trusting relationship. It seemed that this might have been achieved for many of the students so it is to be hoped that the responses were accurate.

Physical health was probably better than that revealed in the AIM HI schools[11]. The results were very similar to those seen in the Youth 2000[12] study. The young people in this study had many protective factors and were also fairly low in vulnerability

factors. Mental health issues particularly low mood and thoughts of self-harm were the major problems.

There were both strengths and weaknesses in doing focus groups with this age group. The participants were at the 'start of their high school years' and may not have had a significant grasp of the main health issues facing young people in their area and therefore did not readily talk about them, in depth. This may have also been a reflection of a reluctance to talk about sensitive issues within the group context. To mitigate against this we used open ended questions and talked in the 'third person' when exploring sensitive issues. For instance, instead of asking the young person where they would go for sexual health advice or if they felt down, we asked where they would take a friend who needed help.

But there were also strengths in choosing this group. We explored these issues at a formative stage in the development of their perception of heath issues for young people and youth health services. This will be particularly important, if the youth health survey is done every year, as it is this group that will be targeted, with the aim of getting them connected to a health service for the rest of their high school years.

While we asked the participants questions such as, 'what were the main issues for young people in their community'; the majority of the focus group questions were orientated towards barriers to accessing current health services for young people and how a service might be designed for them.

Therefore the focus group data collected cannot be regarded as representative of the main issues for young people in the communities they were from, as this would require a community needs analysis and interviews with other community stakeholders such as local community groups and community workers.

The important part of the results of this study was that all parts of it seemed to agree that the process of doing the survey was acceptable, and there was agreement from the students, the nurses and the staff contacts on the shape of a future school health service.

An interesting post script to the study has been that the nurse who was employed for 10 hours a week by one of the schools, has nearly doubled the number of students seen compared to last year with over 100 more students, even though her hours have not been increased. She is working extra hours a week unpaid to meet the need. The nurse attributes this directly to the fact that students are now much more aware of the existence of the service.

School health service provision is not new and has been provided around the world, but especially in England, since the eighteen hundreds. In October 2005 the European Union for School and University Health and Medicine (EUSHM) met in Dubrovnik and declared some important principles:

1.School Health Care is a success story for more than 100 years

2.Inequalities in health during childhood and adolescence are increasing

3. New health priorities are challenging us in the 21st century

4. School health care should be of the highest political priority

5. School health care should be organised without thresholds

6. The school is an ideal setting to reach children and adolescents for health care programmes

7. Evidence-based school health care should be aimed for by supporting scientific research

8. Highly qualified school health professionals are needed

School health services are already provided in New Zealand and they take various forms from the provision of a "one stop shop service" in schools such as Papanui High School in Christchurch, and High Schools in Rotorua to visits from a Public Health Nurse or the presence of an office staff member who is responsible for giving out band aids and paracetamol. There is a strong move in New Zealand to drive the setting up of a consistent, high quality school health service.[13] The government is also recognising this need and the budget announcement of funding for school health nurses in decile 1-3 schools, with a promise of further role outs is evidence of this.

Recommendations

The study revealed:

- That the major health issues were around mental health
- That most young people do not refer themselves to help
- A trusting relationship with a health professional is crucial to accessing health care for young people

- Therefore we recommend that a health professional such as a nurse should be present in each school to enable access to health care for young people

The RCPHO have set up an innovative service in North Canterbury for primary mental health care brief interventions with both adults and young people. The main difficulty is linking young people with the service. This is usually done through referral from community agencies. If the school nurse can inform students at the High Schools that further intervention is helpful at an early point in time, the help they receive will be more effective.

The young people involved in the focus groups were very clear that the form of the service was not as important as the person or people that run it. It was very apparent that a skilled health professional able to communicate well and form trusting relationships was more important than the facilities in which they worked.

The nurses and the health contact in each school were clear that they felt that each school should have its own nurse and that the nurse should be present daily. In the larger schools they felt that this should be for at least 30-40 hours a week. The nurse needs to be well trained preferably with some training in brief intervention in mental health issues. The nurse should fulfil the following roles:

- Seeing students on a drop in basis
- Doing a health status “HEADS” survey for all year 9 students in their first term
- Liaise with the health team in the school, with both teachers in the pastoral care team, the school counsellor, health teachers and visiting health care professionals.
- Refer students for further health care where appropriate
- Meet with colleagues for professional support and ongoing training
- Meet with supervisor on a regular basis

The AIM HI school nurse team have a professional job description including standards for training, and protocols and policies for health care.

Facilities

These should ensure as much privacy as possible, with a waiting room, and preferably the clinic room should be equipped with an examination couch and include a wash hand basin. The appointment process is crucial to the success of the way that access occurs. It needs to be flexible enough to fit people in, but at the same time allow privacy so that students do not feel that everyone knows that they are seeing the nurse.

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