The Crossroads Rural Health Studies

HEALTH IN THE COBRAM COMMUNITY

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Includes Crossroads Household Survey Parts 1 and 2, and the Crossroads Undiagnosed Disease Study

INTRODUCTION

Health research has found that rural people tend to have poorer health than their metropolitan counterparts.[1,2] Poorer health in the rural population is evidenced by higher mortality and morbidity rates, resulting in a lower life expectancy.[1,5] Australia's rural population also has a higher hospitalisation rate for some causes of ill health,[1,3] such as accident and injury, road vehicle accidents, burns and scalds and diabetes.[1] There is, however, limited comprehensive information on the health status of rural Australians, making assessment of the populations health and their health service needs extremely difficult.[2,4]

Many factors contribute to poorer health of the rural population in Australia. Documented factors include geographic isolation, access to care, shortage of health care providers, lack of health services, socioeconomic differences, a higher probability of accident and injury, poorer road quality and small populations spread over a greater distance.[1] These and most Australian rural health statistics are based on overall statistics collected from states and non-metropolitan regions. Little information exists at a local level that provides a detailed understanding of the health profile of specific rural communities and compares differences between rural communities.

The aim of the Crossroads Rural Health Studies was to collect detailed information about health, health behaviours, lifestyles and access to health services in communities across the Goulburn Murray region. The information will be used to identify the needs of consumers and the local community and thus contribute to health service planning and shaping rural health policy. The Crossroads Rural Health Studies are unique, as they provide the most detailed rural health information in Australian communities.

THE TOWN OF COBRAM

The township of Cobram is located on the Murray River in Northern Victoria. Originally, Cobram was a pastoral station established in 1845, comprising of 128,640 acres, situated between the Yarrawonga Run and Ulupna Island.[12]

The late 1880's brought about innovation and change in Cobram, and the townspeople saw the opening of their first school in 1888. At this time there was anticipation that the Numurkah railway line would be extended to reach Cobram, which it did and the construction of Cobram's first railway station was constructed. In 1889, a punt service across the Murray River opened, connecting New South Wales to the Cobram railway terminus. The old punt was replaced in 1903 by the Cobram-Barooga Bridge. The early 1890's saw the growth trend continue with the development of two hotels, three stores, two factories, a newspaper, a sawmill, a mechanic and a number of churches.[12]

Over the years the people of Cobram faced a number of hardships, and the major and recurring battles was against frequent flooding. Floods tormented the town before the onset of the 1890's depression and during this time unemployed workers built levy banks along the edge of the Murray River.[12] Major floods have still ravished Cobram in 1917, 1956 and again in 1975. However, cooperation of the local community on a number of occasions have prevented floodwaters entering the town.[15]

1949 was another turning point in the history of Cobram when it adopted a town plan, which focused on industrial and urban growth. It was at this time that the Murray Valley Settlers' League established a dairy-goods factory in the town and introduced the Murray Goulburn Co-operative Company. The Co-operative grew and by the 1970's became one of the largest dairy companies in the southern hemisphere.[12]

In the 20 years following the Second World War Cobram's population tripled and today it has a population of 4,554 people.[14] The Cobram District Hospital has 30 acute beds and provides obstetric maternity services, nursing home care unit and a domiciliary care service.[13] The township has 4.6 full time equivalent practicing GP's, along with Chiropractors, Physiotherapy, Naturopathy, and Massage Therapists. There are a number of tourist attractions such as Thompson's beach and the Annual 'Peaches and Cream' Festival.

METHOD

The Crossroads Rural Health Studies are a collection of population health studies, involving residents of Shepparton and Mooroopna along with the 6 shire capitals in the region, namely Alexandra, Benalla, Cobram, Echuca, Euroa and Seymour. A total of 9,260 people participated in the studies with 1,455 undertaking a health check up.

A questionnaire was designed which included key questions used in many health studies throughout the world, so that comparisons between the Goulburn Murray and other areas could be made. In addition, some questions asked about specific local issues and respondents were given the opportunity to raise issues of concern to them. Residential addresses were randomly selected from household garbage collection/water lists. The household survey was undertaken in two parts with recruitment approaches differing between the first and second parts. All members of the household were invited to participate. Between September 2000 and December 2002 fieldworkers visited each house selected and interviewed each member of the household. For children under 16, interviews were completed by the parent/guardian. A total of 665 questionnaires were completed from residents of Cobram. All this information was entered into the computer database and statistically analysed. The household response rate for the studies were 67%.

Some residents were again asked to attend a free, 2-hour health clinic in their own community. At this clinic, the participants were tested for: hearing, eye sight and a range of undiagnosed diseases, including diabetes, heart diseases, respiratory disease, blood pressure, liver function, and cholesterol levels. Participants received a health report with the test results. The response rate for the Undiagnosed Disease Study was 61%. This information was analysed anonymously and collectively to determine the health status of each community.

FINDINGS

A total of 559 adults completed the questionnaire in Cobram. Of these, 44% were male and 56% were female (see Table 1). Of the 559 respondents, 7 in 10 were married or in a de facto relationship and 61% of households had residents under the age of 18 living in the home. Nearly all respondents (95%) spoke English at home. The most common language spoken at home other than English was Arabic (3.5%). Length of residence ranged from less than a year to 87 years, with an average of 14½ years.

Table 1: Characteristics of the Cobram samples (Part 1 & Part 2)

Characteristic	*Cobram*	*All participants*
Number of Adults Surveyed	559	6,375
% Female	56%	57%
% Married/De facto	68%	67%
% Speak English at home	95%	97%
% Own their own dwelling	67%	70%
Average length of Residence	14.5 years	21 years
% with Private Health Insurance	11%	43%
% Completed secondary school	40%	47%
% Working full-time in Paid Labour	30%	34%
% Working part-time in Paid Labour	16%	17%
% Retired	28%	19%
Income (median)	$523	$580

Most respondents in Cobram (67%) owned their own home or unit with 27% living in rental accommodation. The percent of people who were living in their own home was similar to the national average of 66%.[6] A third of residents had private health insurance, less than the Australian average of 45%.[7]

Of the 559 adults that completed the survey:

- 7% had completed a University degree, slightly less than the national average of 9%[6]
- 40% had completed secondary school and/or trade certificate (including 7% with University degrees)
- 38% had completed year 9 or more, but not year 12
- 22% left school before year 9

In Cobram, the employment status of respondents was:

- 30% of the respondents worked full time
- 16% worked part time
- 28% were retired
- 3% were students
- 4% were not working but not retired
- 4% were unable to work due to illness

Households in Cobram earned between $120 and $1000 per week before tax. The median was $523. In addition, 53% reported having access to a computer at least weekly and a third reported access to the internet at least weekly.

LIVING IN COBRAM

All 559 respondents were asked how sorry or pleased they would be to leave Cobram. A total of 70% said they would be very sorry or somewhat sorry to leave. 12% indicated that they would be pleased or very pleased to leave. Most respondents (60%) were involved in a local community club or group, with some being members of up to 4 groups.

Respondents were asked to indicate how concerned they were about a range of issues in their local area. Respondents were provided with a four point scale from 'not at all concerned' to 'very concerned'. Table 2 presents the percent of respondent's indicating they were concerned or very concerned. More than half the respondents were concerned about crime, unemployment and health care.

Table 2: Concern about Issues in Cobram

Issue	*Concerned*	*Very Concerned*
Crime	28%	50%
Unemployment	33%	36%
Quality of health care	22%	36%
Quality of education	21%	20%
The future of farming	24%	18%

Respondents were also asked to rate their satisfaction with local facilities and services (see Table 3). At least 6 in 10 were satisfied with the local hospital, exercise facilities and local schools.

Table 3: Satisfaction with local facilities in Cobram

Issue	*Dissatisfied* [1]	*Satisfied* [2]
Local hospital	16%	64%
Access to exercise facilities	13%	64%
Local schools	9%	61%
Local entertainment	25%	46%
Local government	24%	42%
Public transport	38%	27%

1 This includes respondents rating the item as 'dissatisfied' and 'very dissatisfied'
2 This includes respondents rating the item as 'satisfied' and 'very satisfied'

HEALTH

Self reported health status is a commonly used measure of an individual's health.[8] The proportion of respondents in Cobram who rated their health as excellent, very good and good (78%) was slightly less than the Victorian average (82%).[8]

When asked to rate their own health respondents rated their health in the following ways:

- 11% as excellent
- 33% as very good
- 34% as good
- 19% as fair
- 3% as poor

As an indicator of quality of life, respondents were asked to rate their happiness:

- Very happy 23%
- Happy 40%
- Somewhat happy 15%
- Mixed, equally happy and unhappy 16%

A further 3% described themselves as somewhat unhappy, another 2% as unhappy, and 1% as very unhappy.

When asked about health checks in the past two years, residents in Cobram reported generally having more checks than the Victorian average.[8]

- 89% had their blood pressure checked, higher than the state average of 79%.
- 56% of women had a pap smear, lower than the state average of 62%.
- 60% had a cholesterol check, higher than the state average of 46%.
- 55% had a test for diabetes or high blood sugar, also higher than the state average of 45%.
- 22% had a bowel examination, higher than the state average of 15%.
- 33% had a skin examination (for lesions or cancers), higher than the state average of 25%.
- 71 % of women 50 years and over had a mammogram, similar to the state average of 73%.
- 63% of men 50 years and over had a prostate check, higher than the state average of 53%.[8]

Respondents were also asked if they had a range of medical conditions (see Table 4). Eye problems (which included wearing glasses), high blood pressure, arthritis and allergies were the most common conditions. This is similar to the Australian average.[9] In addition, 14% also indicated an injury had prevented respondents from attending school or work.

Table 4 Self-reported medical conditions for adults in Cobram

Medical Condition	*Percent*
Eye Problems	37%
High Blood Pressure	24%
Arthritis	19%
Allergies	16%
Hearing loss	15%
Skin conditions	13%
Asthma	13%
Cancer	12%
High blood fats	12%
Digestive problems	11%
Other chronic health problems	9%
Heart disease	8%
Depression	8%
Respiratory problems	7%
Diabetes	7%

Further, 83% had been immunised for childhood diseases, 58% had a tetanus booster in the past 10 years and 18% had a pneumonia vaccine in the past 5 years. A further 38% had a flu vaccine in the past 12 months. However, most respondents (92%) had never donated blood.

USING HEALTH SERVICES

In the past 12 months, respondents had visited their GP up to 49 times, but the average number of GP visits was 6. 85% of respondents visited a GP in Cobram, 5% travelled to Numurkah, 2% travelled to Melbourne, 2% travelled to Yarrawonga and 2% travelled to Shepparton.

Respondents waited anywhere up to 60 days for an appointment with their GP, however 71% waited 1 day or less, 10% waited 1-2 days and 10% waited 2–7 days. Most reported being satisfied with their GP, 32% being very satisfied and a further 42% were satisfied.

Among the survey participants, 18% had been hospitalised in the past 12 months, two thirds of these were hospitalised just once. Of those respondents who had been hospitalised, 43% were hospitalised at the Cobram District Hospital, 32% travelled to Shepparton, 7% travelled to Wangaratta, 5% travelled to major hospitals in Melbourne and 5% travelled to Numurkah.

In the past 12 months, 19% of participants had been to an Emergency Department. Three quarters visited the Emergency Department at the Cobram District Hospital and 10% travelled to Shepparton. Of those who visited the Emergency Department, 69% waited less than 1 hour to see the doctor, 21% waited 1-3 hours, 5% waited 3-6 hours and 4% waited over 6 hours to see a Doctor.

Participants were asked if they had visited a Medical Specialist in the last 12 months. In Cobram, 35% of the respondents had seen a Medical Specialist, usually out of Cobram. Of these, 3% saw the Medical Specialist in Cobram, 54% travelled to Shepparton, 14% travelled to Melbourne, 11% travelled to Albury/Wodonga and 11% travelled to Wangaratta.

A third of respondents (36%) had consulted a Dentist/Dental professional within the last year. For 41% it was more than 2 years since they had consulted a Dentist/Dental professional. The major reasons why respondents did not consult a Dentist were: "no need", "fear" and "cost".

In addition to questions about visits to medical professionals, respondents were also asked about consultations with a wide variety of other health professionals. Listed below are the percent of those respondents who visited an:

- Optician/Optometrist 25%
- Hospital outpatient clinics 16%
- Pharmacist (for advice only) 15%
- Chiropractor/Osteopath 12%
- Physiotherapist 10%
- Hospital day surgery 9%
- Registered nurse/midwife 6%
- Used an ambulance 5%

A series of open ended questions were asked to determine what Cobram residents thought were the key issues in obtaining health care in their local community. The first question asked about concerns with the medical care provided in the community. 518 people answered the question, giving 681 responses (some respondents gave more than one answer). From these 681 responses, 112 indicated there were 'no problems' with the local medical service and 61 responded with positive comments. From the remaining 508 responses the most common concerns were:

- Lack of Doctors, Nurses and Medical Specialists (123)
- The high turnover of Doctors (63)
- Lack of Australian/English speaking Doctors (45)
- General concern of the quality and competency of Doctors (43)
- Language/communication problems between the Doctor and the patient (35)

Another question asked about concerns with the local Emergency Department. 501 people answered the question, giving 562 responses (some respondents gave more than one answer). From these 562 responses, 225 indicated that they had no concerns and 39 noted they were happy with the Emergency Department. Of the 298 remaining responses the most common concerns were:

- Having to pay an upfront fee at Outpatients/Emergency department before being seen by a Doctor (34)
- Long waiting times in the Emergency Department, to see the Doctor (27)
- No resident Doctor at the hospital covering 24 hours (24)
- The distance required to travel to see Specialists (22)

The Crossroads Rural Health Studies asked local residents what they perceived to be the issues in accessing health care, or the 'barriers to care'. Participants were asked what they thought were the issues around accessing health care. 486 people answered the question, giving 569 responses (some respondents gave more than one answer). From the 569 responses, 196 indicated that they had no concern and 30 responded with positive comments. Of the 343 remaining responses, the most common concerns were:

- The distance required to travel for services eg Specialists (51)
- Lack of Doctors, Nurses and Medical Specialists (30)
- Respondents concern of the Quality/Competency of Doctors (23)
- The number of days required to wait for a Doctors appointment (21)

LIFESTYLES

Lifestyle is related to health, so respondents were asked about their health behaviours, including diet. Table 5 presents how often respondents in Cobram ate takeaway food as a main meal.

Table 5: Takeaway food as a main meal in Cobram

How often?	*Percent*
Never	17%
Less than once a month	34%
2 to 3 days a month	28%
1 to 3 days a week	19%
4 to 6 days a week	1%

Respondents were asked how many serves of fruit, vegetables and diary products they consumed each day (see Table 6). In Cobram, 29% consumed the recommended amount of vegetables, 49% ate the recommended serves or more of fruit and 60% ate the recommended amount of dairy products. On the other hand, 71% of respondents were not eating the recommended serves of vegetable, half were not eating the recommended amount of fruit and 40 % were not eating the recommended amount of dairy products.

Table 6 Consumption of fruit, vegetable and dairy product for adults in Cobram.

	Recommended serve	*Number of serves eaten*	
Vegetables	5 serves[10]	1-3 serves	70%
		4-5 serves	25%
		6 or more	4%
		Don't eat veggies	1%
Fruit	2 serves[10]	1 serve or less	46%
		2-3 serves	40%
		4 and more	9%
		Don't eat fruit	5%
Dairy	2-5 serves[10]	1 serve or less	38%
		2-5 serves	58%
		6 and more	2%
		Don't eat dairy	2%

Respondents had approximately 5½ drinks of alcohol in an average week. The most common alcoholic drinks were wine (33%) and full strength beer (24%).

Of those surveyed, 22% did not currently smoke and 52% had never smoked. The remaining 26% smoked between 1 and 100 cigarettes per day. This is similar to the Victorian average of 25% identifying themselves as current daily smokers.[8]

A total of 7 in 10 respondents participated in physical activity and on average exercised 4 times per week. The average length of each exercise session was 45 minutes. The most popular form of exercise was walking (45%).

When asked how often respondents deliberately took protective measures when out in the sun, a third 'always' took protective measures, an additional 29% reported 'usually' while 6% 'never' took protective measures. The most common protective measure was using a hat (68%), followed by sunglasses (60%), sun screen (60%) and clothing (34%).

CHILDREN

In Cobram, parents or guardians completed a survey on behalf of 106 children. The survey was completed for all children living in the household aged between 1 and 15 years inclusive. Of these, 50% were male and 49% were female. From the children's surveys, 72% had access to a computer at least weekly and 52% had access to the internet at least weekly. Immunisation rates for children in Cobram were 93%.

Of national concern are the eating patterns of children. In Cobram, 73% of children surveyed were not eating the recommended serves of vegetables, 54% were not eating the recommended serves of fruit and 43% were not consuming the recommended serves of dairy products (see Table 7).

Table 7: Consumption of fruit, vegetables and dairy products for children in Cobram.

	Recommended serve	*Number of Serves eaten*	
Vegetables	5 serves[10]	1-3 serves	72%
		4-5 serves	24%
		6 and more	4%
		Don't eat veggies	1%
Fruit	2 serves[10]	1 serve or less	50%
		2-3 serves	38%
		4 and more	8%
		Don't eat fruit	4%
Dairy	3-4 serves[11]	1 serve or less	41%
		2-5 serves	55%
		6 and more	2%
		Don't eat dairy	2%

Parents and guardians were also asked to indicate if their children had any medical conditions. Asthma was the most common condition reported for children in Cobram, which is comparable with the other towns in the studies. Skin conditions (15%), allergies (7%) and eye problems (6%) were other most common reported medical conditions for children in Cobram.

In the past 12 months, 12% of the children had been hospitalised. Of these, half were admitted at the Cobram District Hospital and 36% had travelled to Shepparton. In addition, 18% of the children had been to an Emergency Department in the past twelve months. Three quarters of these visits were at the Cobram District Hospital and 16% visited Goulburn Valley Health. Of these attendances, over half waited under an hour for their consultation, 19% waited 1-3 hours, 6% waited 3-6 hours and 3% waited over 6 hours for a consultation.

UNDIAGNOSED DISEASE STUDY

As part of the Crossroads Rural Health Studies, 1,455 randomly selected adults (aged 25 years and over) attended the Undiagnosed Disease Study held in each town. The Cobram clinics were held at the Cobram Civic Center and the Uniting Church Hall in Cobram. 118 residents from Cobram attended the clinics.

- Cobram residents had the highest rate of chronic obstructive pulmonary disease and other lung diseases (defined as reduced spirometry measures: 20%) of the 8 study communities. However, compared to the other study towns, Cobram had lower rates of hearing loss (5%) but an additional 8% used a hearing aid, which was high in comparison. The vision impairment or vision requiring correction rate was also quite low (17%) in comparison to the other study towns.

- The rate of high blood pressure for Cobram residents was 14% (with or without diagnosed hypertension, defined as blood pressure of 160+ mm Hg systolic and/or 100+ mm Hg diastolic). This was not as high as in many other study towns, however was greater than the Australian average (10%).[9]

- 34% of the study population in Cobram was categorised as obese (defined as body mass index of 30 kgm^{-2} or more). This was the second highest amongst the study communities, greater than the national average (17%)[9] and greater than that found in the Australian Diabetes, Obesity and Lifestyle Study (21%).[16]

- Likely mild inflammation of the liver for Cobram residents was 8%, as indicated by serum liver enzymes and was less common than all other study towns.

- Renal impairment (as assessed by serum creatinine concentration above the reference range for age, sex and weight, (those with diabetes excluded)) was less common (7%) than in the other study towns.

- Anaemia and rates of leucocytosis (white blood cells) were the lowest in the region (1% and 0% respectively).

Note: This is based on preliminary data.

CONCLUSION

In Cobram, more women than men completed the survey. Cobram had the same level of home ownership and number of people renting as the average in Australia.[6] The Crossroads Rural Health Studies found that most respondents were happy to be living in Cobram and nearly two thirds of respondents were members of local community clubs, groups or organisations. Being actively involved in the community seems to be very important to a large portion of the respondents and leads to better health.[17]

Cobram respondents were particularly satisfied with the local hospital, access to exercise facilities and local schools, but were less satisfied with public transport and least concerned about the future of farming. Most respondents were satisfied with the services provided by the local hospital.

Happiness is an indicator of quality of life and in Cobram nearly two thirds of participants rated themselves as happy or very happy. In addition, self reported health status is a commonly used measure of an individuals health.[8] In Cobram, slightly less people rated their health as good or better than the Australian average.[9] Cobram residents had similar long term medical conditions as the average in Australia, most commonly eye problems, high blood pressure, arthritis and allergies.[9] Cobram respondents tended to have more health checks than the Victorian average.[8] These checks included blood pressure, cholesterol, blood sugar, prostate checks, skin examinations and bowel checks. Although rural health research indicates that rural people tend to have poorer health than their metropolitan counterparts,[1,2] the Crossroads Rural Health Studies illustrates that residents in Cobram had more health checks and their health is on a par with the majority of Australians, rural or metropolitan.

A major issue that was consistently raised was the general concern about the lack of medical professionals in Cobram. This included a lack of Doctors, Nurses and Medical Specialists along with the distances required to travel for consultations. The lack of health professionals was an issue in the emergency department, inpatient care, medical care and health services in general.

The high turnover of Doctors in Cobram was a common concern. Cobram has a history of a high Doctor turnover in recent years and this was raised as a major concern for a lot of people. The policy of having to pay an upfront fee at the Emergency Department was also a major concern. Overall, respondents in Cobram did not have any major issues with the health services, as the majority of people responded with 'no problem.'

In conclusion, it appears that the health status among Cobram residents, along with the other towns in the Rural Health Studies (Alexandra, Benalla, Echuca, Euroa, Mooroopna, Seymour and Shepparton), is not markedly different to the Victorian average, despite previous health research indicating that rural people have poorer health than their metropolitan counterparts. However, when rural people become unwell, access to medical care may become a problem. We believe that the results of the Crossroads Rural Health Studies will provide information that is both useful and meaningful to the people of Cobram and that benefits will come from it.

The Crossroads Team would like to Thank all those who completed a Household Survey and everyone who came along to the Undiagnosed Disease Study.
Thank You!

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