

AN INVESTIGATION INTO THE MENTAL HEALTH NEEDS OF ADOLESCENTS IN RURAL AREAS OF SOUTH AUSTRALIA

Thesis submitted in fulfilment of the requirements for the Degree of Doctor of Philosophy

Marijeta Kurtin
October 2010

Discipline of General Practice
School of Population Health and Clinical Practice
The University of Adelaide

TABLE OF CONTENTS

Table of Contents	
List of Tables	v
List of Figures	vi
List of Appendices	Vii
Abstract	ix
Statement of Authorship	xii
Acknowledgements	xiv
CHAPTER 1	1
THE MENTAL HEALTH OF RURAL ADOLESCENTS:	1
A LITERATURE REVIEW	1
1. Preamble	1
1.1 The prevalence of mental illness	2
1.2 Prevalence of mental health problems amongst adolescents	4
1.3 The mental health of rural adolescents	8
1.4 The mental health of rural Australian adolescents	10
1.5 Mental health policy in Australia	12
1.6 Rural mental health services	15
1.7 Rural "culture" and its implications for mental health care	18
1.8 The ,stigma" associated with mental health service use	
1.9 Defining "Adolescence"	24
1.10 The influence of "nurality" on service utilisation for adolescents.	27
1.11 Current service utilisation by adolescents	30
1.12 Acknowledging the gaps in "youth" mental health	34
1.14 Thesis rationale, aims and structure	39
CHAPTER 2	44
RESEARCH METHODOLOGY:	44
THE VALUE OF UTILISING A "MIXED METHODS" APPROACH FOR	
MENTAL HEALTH RESEARCH	44
2.1 Introduction	44
2.2 Overview of methodology	44
2.3 Multi-method or ,Mixed" methods?	56

		2.4	"Triangulation" defined	60
		2.5	The role of the "researcher" in the current study	61
		2.6	Ethics	63
		2.7	Data collection	65
		2.8	Conclusions	67
CHA	РΤ	ER 3		68
	Н	JMAN SI	ERVICE PROVIDERS" PERCEPTIONS OF THE MENTAL HI	EALTH
	NI	EEDS OF	RURAL SOUTH AUSTRALIAN ADOLESCENTS:	68
	A	PRELIMI	NARY EXPLORATORY STUDY	68
	1.	Introduct	ion	68
	2.	Method		72
	3.	Results		82
		3.1	Community and Society Factors	86
		3.2	Youth Issues	91
		3.3	Indigeneity	97
		3.4	Service Delivery and Utilisation	101
		3.5	Occupational Factors	109
	4.	Discussio	on	116
		4.1	Mental health problems amongst rural South Australian	
			adolescents	116
		4.2	Drug and alcohol use	117
		4.3	Barriers faced by adolescents	118
		4.4	The importance of ,informal" mental health service providers	119
		4.5	The overstretched nature of South Australian mental health	
			services	120
		4.6	The role of the General Practitioner in providing mental health	care to
			adolescents	121
		4.7	Study limitations	122
		4.8	Study strengths	124
	5.	Conclusion	on	125
	6.	Recomm	endations	126

CHAP	ΓER 4	128
T	THE MENTAL HEALTH NEEDS OF RURAL SOUTH AUSTRALIAN	
A	ADOLESCENTS FROM THEIR PERSPECTIVE	128
1	. Introduction	128
2	. Method	131
3	Results	147
	3.1 Recognition of Mental Health Issues	151
	3.2 Accessing Care	152
	3.3 Alice"s Situation	154
	3.4 Formal versus Informal Service Provision	156
	3.5 Problems/ Need for Improvements	158
	3.6 Mental Health Knowledge	165
4	. Discussion	182
	4.1 Recognition and identification of mental health problems	182
	4.2 The experience of ,rurality"	184
	4.3 Mental health care	186
	4.4 Study Limitations	189
	4.5 Study Strengths	190
5	. Conclusions	191
6	. Recommendations	192
CHAP	TER 5	198
A	QUANTITATIVE INVESTIGATION INTO THE MENTAL HEALTH AN	۷D
V	VELLBEING OF ADOLESCENTS IN RURAL SOUTH AUSTRALIA	198
1	. Introduction	198
2	. Method	200
3	. Results	210
	3.1 Response Rate	210
	3.2 Descriptive statistics	213
	3.3 Gender Differences on Psychological Health Measures	215
	3.4 Health Risk Behaviours	218
	3.5 Sexuality	225
	3.6 Current health service usage	226
	3.7 Future help seeking	227
	3.8 Mental health knowledge	229

4. Discussion	231
4.1 Mental health status and psychological health	231
4.2 Health risk behaviours	236
4.3 Health service usage	240
4.4 Mental health knowledge	242
4.5 Limitations	245
4.6 Study Strengths	249
5. Conclusions	250
CHAPTER 6	253
THE MENTAL HEALTH AND WELL-BEING OF ADOLESCENTS II	N RURAL
SOUTH AUSTRALIA: A COMPARISON OF DATA COLLECTED BI	ETWEEN
2001 AND 2009	253
1. Introduction	253
2. Method	255
3. Results	262
3.1 Descriptive statistics	262
3.2 Cohort Differences on Psychological Health Measures	266
3.3 Health Risk Behaviours across Cohorts	268
4. Discussion	275
4.1 Worsening mental health?	276
4.2 Health risk behaviours	281
4.3 Social changes in rural South Australia	284
4.4 Limitations	288
4.5 Study Strengths	290
5. Conclusions	291
CHAPTER 7	294
CONCLUSION AND RECOMMENDATIONS	294
7.1 Aim of this chapter	294
7.2 Overview of findings	294
7.3 Recommendations for future mental health practice	302
7.4 Recommendations for future research	306
7.5 Concluding remarks	311
APPENDICES	314
REEERENCES	400

LIST OF TABLES

Table 1: Differences between qualitative and quantitative research	55
Table 2: "Ways of combining qualitative and quantitative methods"	58
Table 3: Timeline for ethics approval for Studies 2 and 3	65
Table 4: Participation recruitment by sampling method.	76
Table 5: Data collection summary.	80
Table 6: Occupations of participants.	83
Table 7: Demographic characteristics of sample.	84
Table 8: Data collection summary	139
Table 9: Demographic characteristics of sample.	147
Table 10: Step 3 of Framework Analysis: Indexing example for transcript of	
Focus Group E, pages 1 and 2	170
Table 11: Step 4 of Framework Analysis: Charting excerpt 4, "Formal vs. Informal	"173
Table 12: Step 4 of Framework Analysis: Charting excerpt 5, "Problems needing	
improvement".	174
Table 13: Step 4 of Framework Analysis: Charting excerpt 6, "Mental health	
knowledge"	176
Table 14: Response rate by school.	211
Table 15: Demographic characteristics of sample.	213
Table 16: Numbers of participants reporting experience of the suicide of others	216
Table 17: Gender differences in coping strategy.	217
Table 18: Comparison of males and females on psychological health measures	218
Table 19: Comparison of males and females on health risk behaviours:	
Continuous outcomes	219

Table 20:	Types of alcoholic drinks consumed by participants	.220
Table 21:	Comparison of males and females on health risk behaviours:	
	Categorical outcomes	.222
Table 22:	Professionals to be accessed for future help-seeking, in order of popularity	.228
Table 23:	Comparison of males and females by health service usage:	
	Categorical outcomes	.230
Table 24:	Cross-sectional sampling from the School Leavers Study:	
	Winefield Cohorts by Year and Wave	.256
Table 25:	Demographic characteristics of sample, by year level	.263
Table 26:	Comparison of Winefield Cohorts 1, 2 and 3 with Kurtin Cohort 4 on	
	psychological health measures.	.267
Table 27:	Comparison of Kurtin and Winefield data on health risk behaviours:	
	Categorical outcomes	.272
Table 28:	Comparison of Kurtin and Winefield data on health risk behaviours:	
	Continuous outcomes	.274
Table 29:	Cohort differences on psychological health measures:	
	Kurtin Cohort (4) vs. Winefield Cohorts (1-3)	.277

LIST OF FIGURES

Figure 1:	The health-related quality of life of adolescents according to adolescent	
	self-reports	7
Figure 2:	Barriers preventing adolescents from accessing mental health care	32
Figure 3:	The sequence of the four studies conducted	46
Figure 4:	Timeline of PhD project.	66
Figure 5:	Map of locations, including areas serviced by participants.	74
Figure 6:	Pictorial illustration of a typical focus group.	78
Figure 7:	Pictorial representation of initial codes and overarching themes identified.	85
Figure 8:	Hierarchical structure of overarching theme 1.	90
Figure 9:	Hierarchical structure of overarching theme 2.	96
Figure 10	Hierarchical structure of overarching theme 3.	100
Figure 11	Hierarchical structure of overarching theme 4.	108
Figure 12	Hierarchical structure of overarching theme 5.	115
Figure 13	Townships and schools visited	140
Figure 14	The qualitative analysis continuum	142
Figure 15	Step 2 of Framework Analysis: Initial thematic framework	150
Figure 16	Step 5 of Framework Analysis: Final description of data	178
Figure 17	Recommendations made by adolescents.	197
Figure 18	The townships located in South Australia, and how many participants	
	were recruited from each town.	212

LIST OF APPENDICES

APPENDIX A:	315
Study 1 participant recruitment letter.	315
APPENDIX B:	320
Study 1 participant information sheets, demographic questionnaire and consent	
forms	320
APPENDIX C:	326
Study 2 information sheets and consent forms	326
for students and parents	326
APPENDIX D:	333
Study 2 focus group vignette and referral information provided	333
APPENDIX E:	338
Study 2 additional Step 2 Framework Coding (Chapter 4, Results section)	338
APPENDIX F:	343
Study 2 entire Step 3 Index of Focus Group E (Chapter 4, Results)	343
APPENDIX G:	351
Study 2 additional Step 4 Charts of Focus Group E (Chapter 4, Results)	351
APPENDIX H:	354
Study 3 questionnaire	354
APPENDIX I:	381
Study 4 UniSA's Longitudinal Investigation of School Leavers Study	381
Questionnaire	381
APPENDIX J:	397
Body Mass Index chart for boys (aged 2-20 years)	397
APPENDIX K:	398
Body Mass Index chart for girls (aged 2-20 years).	398
APPENDIX L:	399
List of Schools from the School Leavers Study, accompanied by	
R.R.M.A. Index	399

ABSTRACT

Background & Aims

Recent statistics indicate that up to 20% of Australian adolescents experience the burden of having a mental health problem. International research has suggested that inhabitants of rural areas are at particular risk of mental health morbidity due to their location. Prior Australian research on the subject of rural mental health has tended to have an adult focus, neglecting adolescents. This PhD project sought to gain a deeper understanding of the mental health needs of adolescents in several rural areas of South Australia, and investigate how the experience of "rurality" influenced mental health and wellbeing. Specifically, this project investigated: the mental health and wellbeing of adolescents; the perceptions held about adolescent mental health needs as described by both human service providers practicing in rural South Australian communities and the adolescents residing in them; and finally, comparing the mental health and wellbeing of adolescents observed over the past four to eight years.

Methodology

A mixed-methodological study design was employed, with four separate studies undertaken. Two qualitative studies were initially conducted and they utilised individual interviews and focus group discussions to collect information from 38 rural human service providers and 44 adolescents about the mental health needs they could identify in their communities. In conjunction with this, two quantitative studies were conducted which investigated the mental health and wellbeing of 332 rural adolescents via a questionnaire. Results from this questionnaire study were then compared to existing South Australian data collected in 2001, 2003 and 2005, the aim being to investigate differences in mental health and wellbeing between groups across the three different time periods.

Results

A qualitative study of human service providers in four rural townships identified five major influences on adolescent mental health care in local communities: Community and Society Factors; Youth Issues, Indigeneity; Service Delivery and Utilisation; and Occupational Factors. Significant gaps in mental health service delivery were identified and better implementation of existing resources was identified as being more important than the absence of resources *per se*.

Framework Analysis of qualitative data collected from focus groups with rural adolescents identified three overarching concepts perceived as having an impact on mental health: Recognition and Knowledge; Social Problems; and Accessing Care. Adolescents proved to be highly knowledgeable about the mental health problems in their communities and made six recommendations for improving future service delivery. Their main concerns centred on – reducing the stigma of mental health issues in their rural communities, and importing "younger", less "formal", mental health staff.

The final two studies employed a questionnaire to investigate self-reported mental health and wellbeing. Amongst the adolescents sampled (N=332), gender differences were evident according to measures of psychological health and psychological distress. Male participants reported significantly lower levels of self-esteem (p<.001), trait anxiety (p<.001) and perceived stress (p<.001), than their female peers; but also indicated higher levels of psychological distress (as determined by GHQ score), than females (p=.023). Both gender groups tended to demonstrate low to very low levels of suicidal ideation, but females reported twice the level of suicidal ideation (p=.006) than their male peers.

In terms of wellbeing and health risk behaviours, female participants were found to drink more frequently than males (p=.010), were more likely to use prescription and non-prescription drugs (p<.001; p=.020), smoke ,socially" (p=.004) and participate in ,risky" sexual behaviour (p=.004).

In comparison to existing South Australian data collected in 2001, 2003 and 2005, participants in this study tended to demonstrate significantly poorer levels of psychological health, as determined by social alienation (Yr 10, p<.001 & Yr 12, p=.036), negative mood (Yr 11, p=.035 & Yr 12, p<.001) and GHQ (Yr 11, p=.002 & Yr 12, p<.001) scores. However, they reported significantly lower levels of suicidal ideation than those observed in existing 2001 data (Yr 10, p=.005). Participants in the current study also reported significantly less participation in health risk behaviours, with drinking frequency (Yr 10, p=.002), tobacco (Yr 10, p=.002) and marijuana use (Yr 10, p=.035) being more frequently self-reported amongst participants sampled in 2001.

Conclusions

Using mixed-methods made it possible to undertake a comprehensive investigation of the mental health needs of adolescents in rural South Australia. Qualitative findings indicated that both human service providers and adolescent consumers of mental health care were concerned about the occurrence of mental health issues and gaps in existing service delivery in their communities. Participants provided several recommendations to improve local mental health services and encourage adolescents to access help in the future.

Quantitative findings of this PhD project suggested that the psychological health of adolescents sampled in 2008/9 was poorer than that observed in existing 2001, 2003 and 2005 data; whilst participation in health risk behaviours was less frequent in the 2008/9 sample.

Collectively, the results of this study are relevant to future rural mental health policy, and particularly in geographically similar communities in other states of Australia. In order for improvements to be made which will benefit the mental health of adolescents in rural currents, it is necessary for policymakers and stakeholders to consider not the *amount* of resources available, but rather, how existing health resources are being *managed* within rural communities.

STATEMENT OF AUTHORSHIP

This work contains no material which has been accepted for the award or any other degree

or diploma in any university or other tertiary institution to Marijeta Kurtin and, to the best

of my knowledge, and belief, contains no material previously published or written by

another person, except where due reference has been made in the text.

I give consent to this copy of my thesis being made available in the University Library,

being made available for loan and photocopying, subject to the provisions of the Copyright

Act, 1968.

I also give permission for the digital version of my thesis to be made available on the web,

via the University"s digital research repository, the Library catalogue, the Australian

Digital Theses Program (ADTP) and also through web search engines, unless permission

has been granted by the University to restrict access for a period of time.

Marijeta Kurtin

Date:

xiii

ACKNOWLEDGEMENTS

Completing this PhD project has been a challenging, yet also very personally fulfilling life experience for me. However, it would simply not have been possible without the help and support of so many people. Therefore, I really need to express my deepest thanks and sincere gratitude to the following people:

My Supervisors

Firstly, I thank my principal supervisor – Dr Chris Barton (Discipline of General Practice, The University of Adelaide), for his ongoing support and commitment throughout my candidature, and in particular his research skills and great attention to detail, which I believe have added greatly to the quality of this thesis. Chris, I know that you are just as happy as I am to see me finally complete this project, and I wish you all the best with your new endeavours and new academic position.

Secondly, I must acknowledge Professor Tony Winefield (School of Psychology, University of South Australia). Tony, I thank you for your guidance and unwavering support over the years. You have supervised me in some capacity for the past six years now, and I feel that I have learnt so much from you during this time, even if much of it has been about the English Premier Soccer League. I will sincerely miss working with you, but know that we will continue to keep in touch.

Last but certainly not least, I express my gratitude to Dr Jane Edwards (Hawke Research Institute, University of South Australia). Jane, I cannot express how glad I am that you agreed to come on board and help supervise me.

You have such a wealth of knowledge about rural culture and the de facto mental health system, which has added so much to this project. I have also appreciated the constant encouragement within your e-mails, especially over the past year when I needed it the most.

At this point, it would be remiss of me if I did not acknowledge Dr Nicole Moulding (School of Social Work and Social Policy, University of South Australia). Nicole, thank you for your efforts as my initial principal supervisor, and the part you played in the early conceptualisation and development of this research project. I think we have all missed your involvement in this project, and hope that things are going well for you in your new position.

Funding Providers

I thank the P.H.C.R.E.D. program and the Discipline of General Practice at The University of Adelaide for the Divisional scholarship they awarded me from 2006-9.

Secondly, I thank the Australian Rotary Health Research Fund and the Rotary Club of Holdfast Bay for the scholarship awarded to me in 2008-9. In particular, I acknowledge the late Mr Max Dillon, without whom I am told, such a scholarship would not be possible. I sincerely hope that he would be satisfied with what this project has achieved. I would also like to express my gratitude to the entire Rotary Club of Holdfast Bay, who has hosted me on two occasions in their clubrooms.

Thank you for your hospitality and genuine interest in this research project. You are doing such great work in the community, and I wish you every success in your future projects.

People who have helped along the way...

Dr Jonathan Newbury (Spencer Gulf Rural Health School), Dr Andrew Killcross (Port Augusta Hospital) and Ms Raelene Fuller (Eyre Peninsula Division of General Practice) for their invaluable assistance with the recruitment of rural GPs. "Dropping" your names helped immensely.

Ms Kathy Vidov, for her "research assistance" and graphic design skills. We spent so many late nights working on the figures and images throughout this thesis, not to mention the conference posters. Thank you for being so fussy and for not saying no to my ideas, despite knowing how difficult they would be to physically implement.

Ms Beth Nixon for the hours and hours of verbatim transcribing she conducted. This greatly assisted the data analysis for Studies 1 and 2 (Chapters 3 and 4).

Mr Tom Sullivan for his statistical expertise and assistance with the data analysis for Studies 3 and 4 (Chapters 5 and 6).

Mr Phillip Thomas who edited this thesis in accordance with ASEP Standards for "Language and Illustrations" and for "Completeness and Consistency".

Staff and Students in the Discipline of General Practice

I am so grateful to Ms Nicky Bennett (Discipline of General Practice) who helped put this huge document together. Thank you also for the day-to-day support you have provided to all the students in the DGP. Despite being busy at reception, you always find time for us.

I would like to thank the following PhD and Honours students in the Discipline: Dr Joanne Dollard, Dr Susan Selby, Ms Karina Bria, Ms Kerrie Pickering, Ms Kui Muraya, Mrs Fiona May, Dr Heather Tan, Dr Rosie King, Dr Antonina Mickocka-Walus and Ms Kellie Chugg. I have enjoyed getting to know you all, and I thank you for being so pleasant to share an office with.

Additionally, I acknowledge Dr Karin Ried and the DGP Student Writing Group, and also the Postgraduate Students" Qualitative Research Methods Group for the extremely valuable feedback they have provided about my written work over the years.

Finally, I must acknowledge Professor Nigel Stocks (Head of Discipline) for being so flexible with the changes to my candidature, and for ensuring such excellent resources and supports were available to all students within the DGP.

The School Leavers Study Research Team at UniSA

I would like to acknowledge the research team from the *University of South Australia*"s *Longitudinal Investigation of School Leavers Study:* Professor Tony Winefield, Professor Helen Winefield, Dr Anne Hammarstrom, Dr Paul Delfabbro, Professor Maureen Dollard, Associate Professor Jacques Metzer, Dr Carolyn Boyd, Ms Sarah Anderson and Ms Silvia Pignata. Thank you all for your support and encouragement with my PhD project, and I thank the Chief Investigators especially, for allowing me to use their data for Study 4 (Chapter 6).

My Family, Friends and Work Colleagues

I extend my gratitude to my Mum and Dad, and to my siblings, Mato and Sal, for the combination of encouragement and (well-intentioned) criticism you have all offered to me throughout my candidature. You have kept me grounded and reminded me (many times) that there are bigger things in life than a PhD.

As well as my immediate family who have lived with me and my PhD every day for the past four years, I must acknowledge my extended family in Croatia who have always provided me with kind words of encouragement and "phone support". I especially acknowledge my grandmother.

I acknowledge my friends (who at times I have neglected), my work colleagues at OARS SA, and the students in the 2010 Master of Psychology program at The University of Adelaide. You have all been invaluable supports to me.

My Participants

Finally and most importantly, I need to acknowledge the participants who facilitated the success of this research project. I cannot express how deeply grateful I am for the wonderful insights you have provided to me about everyday life in your rural communities. I thank you for giving up your time to come and talk to a stranger from Adelaide, about such sensitive issues. Without your involvement, I would not have been able to complete this project.

Finally, I express my sincere gratitude to the school Principals and teaching staff who embraced this study. I thank you for distributing questionnaires, chasing up consent forms and for welcoming me so warmly to your school.