

Health Care Spending, Family Structure and Family Health

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Abstract

We use data from the ABS National Health Surveys for 1989/95 and 1995 to examine differences in health care expenditures and health outcomes by family structure. We find that, on average, female single parents tend to experience poorer health outcomes, and exhibit more 'risky' health behaviours (particularly smoking), compared to adults in 'two-parent' families. Children in female single parent families tend to have more chronic health conditions than children in two-parent families. We also find that single parent families tend to spend a lower proportion of their income on health care, while receiving fewer indirect health care resources through government. Policies that may help reduce the economic and health disadvantages facing single parent families are considered.

Introduction

While much is made of the aging Australian population and its likely impact on the composition and magnitude of resources devoted to health-care in the future, the possible effect of changing family structure is often overlooked.¹ In particular, single parent families with dependent children are a significant and growing proportion of all family types, and the proportion is projected to rise still further.² If different family structures are associated with differences in circumstances or behaviours that

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are likely to affect health states, any change in the relative 'mix' of family types is also likely to affect the future need for, and composition of health resources and funding.

Family breakdown is expensive. In addition to the obvious emotional burden for adults and children, there are direct economic consequences for family members that may affect the health and well-being of all concerned. In turn, these influences have important social and economic consequences for Australian governments, Federal, State and local, which provide a safety net for disadvantaged individuals and families.

An important part of this safety net is the financial support provided for the health system, and indeed, governments are overwhelmingly the most important sources of funds devoted to health care expenditure in this country. It is a very costly business. Total health services expenditure in 2000-01 represented 9 percent of GDP in Australia. Average (total) expenditure on these services in that year was \$3,153 per person. If history is a guide, this expenditure will grow in real terms, by more than 3 percent each year while overall health services expenditure will grow at more than 4 percent. Annual growth rates for total government expenditures – currently over \$42 billion³ – are even higher at close to 5 percent.⁴

This paper seeks to examine some aspects of health status, and behaviour which incurs health-risks in order to examine differences, if any, in these attributes by family 'type'. Our study is based on the data in Table 1 which is derived from the National Health Surveys (NHS) of 1988-89 and 1995.⁵ Three family 'types' with dependent children are considered here: two parent families, and single parent families headed respectively by females and males. The objectives are twofold: first to see if there are differences by family type in socio-economic attributes, health status, behaviour leading to health risk, and the use of health resources; and second, to see if expenditure on health care – both direct (by families themselves) and indirect (by governments) – differs by family type. Analysing how the individual components of government health spending are shared among family types is beyond the scope of this study. However, the NHS provide information concerning private health insurance coverage. This enables us to shed light on the likely distribution by family type of the funds allocated to probably the most contentious of the Commonwealth Government's health policies: the \$2 to \$3 billion necessary to fund the 30 percent Private Health Insurance Rebate (PHIR).

Single Parent Families with Dependent Children

Compared with two-parent families, the picture of single-parent families provided by the two National Health Surveys reveals their disadvantage. Their household incomes were significantly lower. They relied far more heavily on government income support, and between 1988-89 and 1995, increasingly on free medical treatment by the provision and use of the government health card. Relatively few had private health insurance. Most, by far, were headed by females. Important sources of their economic disadvantage were their relatively low (and between surveys, declining) workforce participation and high levels of unemployment, and related to this, relatively fewer single parents had post-high school education. If employed, it was more likely to be in part-time, than full-time work. Tending to mitigate their economic disadvantages, single-parent families had fewer children on average than two-parent families, and relatively fewer young (less than 5 years old) children.

Though between the two surveys an increasing proportion of heads of these families were never married, most were separated or divorced, and clearly at least part of the economic disadvantage they suffer is from the separation and division of any family assets and the loss of 'household/family economies of scale in consumption'.⁶ Adding to this is their likely difficulty in finding well-paying work which fits their family commitments.

Family Health

Table 1 also provides information by family type regarding their health risks, health states and use of health resources. Of the potential health risks considered here – smoking, alcohol consumption, weight and exercise – smoking is probably the most serious long term risk. It is accepted as being responsible for a wide range of adverse health conditions, including heart disease, lung and throat cancers and emphysema. These consequences are well known. The differences between the smoking behaviour of the heads of two parent families (all of whom were males in the samples in both surveys) and single parent families (most of whom were females) is particularly striking. Smoking is proportionately almost twice as prevalent for female single heads than both the (male) heads of two-parent families and their (female) spouses. Moreover, while smoking by heads of two-parent families declined significantly between 1988-89 and 1995, there was no change in the smoking behaviour of singles, either male or female.

Table 1. Family Characteristics: 1989 and 1995
 ((%) Except Where Indicated)

ATTRIBUTE	TWO-PARENT		SINGLE PARENT			
	Head		Male head		Female head (spouse)	
	1989	1995	1989	1995	1989	1995
Income (\$'000)	39.0*	40.0*	31.2*	33.3*	19.0*	19.6*
					(14.6)	(18.1)
Age	38.7*	39.6*	41.2*	38.8*	35.7*	34.6*
Migrant	32.8*	29.8*	22.4	22.2	23.6*	21.7*
Children (No.)	1.91*	1.89**	1.50	1.66	1.60*	1.74**
Children <5yrs	56.6*	57.5*	10.6*	18.3*	38.1*	44.6*
No post school education	40.1*	40.3*	53.0*	45.0*	62.1*	63.5*
Marriage status			38.0*	49.0*	29.5*	29.4*
– separated						
– divorced			37.5*	25.1	34.9*	23.3
– never married			10.0*	16.1*	25.0*	39.1*
Health Insurance	55.7*	43.3*	34.4*	21.0	18.4*	11.4*
Govt Health Card	12.2*	18.9*	27.5*	56.5*	70.6*	80.0*
Pension Main Source of Income	6.1*	9.4*	49.6*	42.9**	70.3*	59.8***
LABOUR FORCE PARTICIPATION						
Full time	88.4*	84.0*	68.1*	45.6*	23.6*	20.3*
					(22.0)	(30.8)
Part time	3.8*	4.7*	8.1*	15.3	21.7*	24.6*
					(36.7)	(36.7)
Not in labour force	3.6*	5.8*	15.0*	30.1*	42.2*	47.9*
					(35.8)	(30.2)
Unemployed	3.7*	5.1	6.7*	8.7	11.4*	7.1
					(5.5)	(2.3)
HEALTH CHOICES/RISKS						
Smoker	33.1*	27.9*	52.3	54.0	46.3*	46.2*
					(24.4)	(21.1)
Ex smoker	27.8*	32.1*	19.7	22.4	18.3*	22.5*
					(19.3)	(29.2)
Alcohol – high risk	3.4*	4.6*	6.1**	9.4	1.8***	2.5*
					(1.5)	(1.1)
– mod. risk	3.6	5.5	4.3	2.0*	4.5	5.2*

continued

					(4.7)	(3.8)
Weight – over	50.9*	57.6*	43.4*	38.4	31.3*	35.8*
					(31.4)	(38.7)
– under	4.1*	3.2*	4.8*	11.0	21.9*	18.3*
					(15.6)	(13.0)
Exercise – low	70.3	70.8	64.8	54.2	70.9	69.3
					(77.0)	(75.1)
HEALTH STATES						
Self ass'd hlth – poor	2.3*	1.9	4.3	1.7	4.5*	2.1
					(1.7)	(1.3)
– fair	10.9*	8.6*	15.8	14.1	15.8*	15.4*
					(10.8)	(8.0)
Conditions (No.)	1.26*	1.31*	1.30*	1.22**	1.98*	1.89*(**)
– recent (H)						
(S)					(1.69)	(1.80)
(C)	1.21	1.23	1.01**	.919**	1.22**	1.36**
– chronic (H)	1.38*	1.88*	1.38*	2.14	1.76*	2.17*
(S)					(1.45)	(2.02)
(C)	.551*	.737**	.598	.542*	.683*	.926*(**)
USE OF RESOURCES						
Hospital Episodes	2.4*	3.4*	5.2	0.7*	5.7*	10.0*
(H)						
(S)					(3.4)	(5.1)
(C)	4.4*	5.4**	3.7*	7.0	5.1*	12.9**
Dr visit < 3mths (H)	40.2*	53.0*	49.8*	43.3*	60.6*	62.1*
(S)					(54.7)	(57.3)
(C)	62.6	62.7	47.9*	48.4	62.8*	59.0
No Dr visit in 12 mths (H)	27.1*	22.8*	28.9*	20.8	12.0*	9.8*
(S)					(13.9)	(12.8)
(C)	9.9*	8.4	21.8	14.6	10.0*	7.2
Observations: n =	6478	3037	156	60	1031	606

Comparisons of means for a given year:
 Single parent – male Vs single parent – female.
 Single parent – female Vs two parent.

Significance levels:
 * different at 1 percent
 ** different at 5 percent

Comparisons of means of a given variable:
italics: 1989 significantly different from 1995 at ≤ 5 percent level.

Notes: (H) Head of household; (S) Spouse; (C) Child(ren)

Sources: ABS, *National Health Surveys*, 1988-89 and 1995.

Relatively fewer women – whether single heads or spouses in two-parent households – were at high or moderate risk in terms of their alcohol consumption compared with (male) two-parent heads. Indeed, for these males, the relative proportions of those at risk actually increased between surveys. The same pattern may be observed in the proportions of those incurring risks associated with being obese/overweight, such as heart disease and diabetes. A significantly higher proportion of female singles were underweight – about five times the rate of male heads of two parent families, though only at a slightly higher rate than for their spouses. There were no significant differences in (low) exercise levels.

Generally far higher proportions of female singles assessed their own health as being ‘poor’ or ‘fair’ than (male) heads of two-parent families or their spouses. The relative prevalence of recent and chronic health conditions also differed among family types, with significantly higher proportions of female single parents reporting as suffering such conditions. As well, the reported incidence of chronic conditions increased for heads of all family categories between the two surveys. For the children of single parent families, those headed by females had a higher incidence of recent conditions than the children of their single male counterparts, while children of two parent families suffered significantly fewer chronic conditions than the children of female single parent families.

The proportion of single female heads of family having ‘hospital episodes’⁷ was higher than for the (male) heads of two-parent families (and for their (female) spouses).⁸ A higher proportion of female heads consulted a doctor for their own health in the 3 months prior to interview, and relatively fewer of them had *not* visited a doctor in the preceding 12 months than either of the other groups.

Assessment

Female single parents are less (self-assessed) healthy than male heads of two parent families. Perhaps a better comparison is that they are also considerably less healthy than female spouses in two-parent families. In 1988-89 and 1995 a total of 20 percent and 17 percent of single female heads, respectively, reported their health as being either ‘poor’ or ‘fair’; the corresponding figures for female spouses were 12 and 9 percent. Of the health risks examined here – smoking, (heavy) drinking, (over/under) weight and (lack of) exercise – the prevalence of smoking among female singles was especially noteworthy.

All of this is reflected in the indicators of the use of health resources. Higher proportions of female single parents used hospital facilities in the two weeks prior to the surveys and/or visited a doctor within three

months. Proportionately fewer of them had *not* visited a doctor within the past 12 months.

Did children's health differ among family types? Only limited data were available concerning the health states and conditions of *all* children in families. In many cases such as the incidence of specific health conditions, only responses for children aged more than 10 years were included in the surveys. Of the available data relating to all of the children in the family, the only significant difference across family types was in the average number of chronic conditions of the children in the household:⁹ in both surveys the figures for children in female single parent families was significantly higher than those for two parent families, and in the 1995 survey, significantly higher than those in male single parent families.

Many of the results discussed here confirm the well-known economic disadvantages of single-parent families – in particular their relatively low incomes. At least some of the health risk and health states are likely to be income-related, such as those related to diet. Indeed, there is a significant literature concerning the health consequences of the socio-economic conditions of families. The results are consistent with observations of the lifestyles of poorer people – they 'smoke more, eat less healthily and do not exercise. ... Poorer people frequently had less education and less access to healthier foods or leisure pursuits.'¹⁰ It is likely, however, that this is only part of the story. For example theories have been put forward emphasising the long term effects of early childhood events on health, and even environmental factors before birth. A common link between these and other theories is the attempt to assess the physiological processes by which low incomes/economic status leads to poorer health. Alternative 'economic' explanations involve causal linkages in the other direction: a family's ability to earn income and accumulate assets may be restricted by poor health. It is evident that there is no simple explanation of the tie between health and socio-economic status, and resolving the debate is beyond the scope of this paper.¹¹

Health Spending and Families

In 1998-99 (the latest data available) two parent households with dependent children derived an average of \$1177 per person in indirect government health benefits and despite their significantly higher availability/usage of the government health card, the corresponding figure for all single parent households was slightly lower at \$1167.¹² Average direct expenditure per person on medical care and health expenses for the two groups was \$490 and \$276, respectively.¹³ Thus, single parent

households (ie. whether headed by males or females) with lower average incomes, heads with poorer (self-assessed) health and higher numbers of recent and chronic conditions per person for both themselves and their children, on average derived less in indirect health benefits per person from government, and spent less per person on medical and health care than couples with children. That the direct spending of single parent families was lower is hardly surprising, given their lower average incomes, but the *proportion* of average household income per person spent was also lower for single parent households (2.9 percent) than two parent households (3.3 percent).

While much of the disparity in the health indicators between the two parent and single parent families may be attributable to the latter's lower incomes, and lower direct expenditure on health and medical care, adding to their disadvantage was that less indirect expenditure per person was devoted to their medical and health care by government. Of the many current health programs of the Federal government, probably none is more controversial than its 30 percent rebate on private health insurance premia. Expenditure on this scheme totaled more than \$2.1 billion in 2000-01. Treasury forecasts suggest this figure will rise to about \$3 billion in 2003-04.¹⁴ This paper has shown that single-parent families had disproportionately low coverage by private health insurance, and by implication, a similarly low share of these funds. Indeed, the rate of coverage for single parent families headed by females in both surveys was only one-quarter that of two-parent families. There is no more recent comparable data currently available, but it appears unlikely that the disparity in coverage would have changed greatly since the last NHS. If this is so, then with the 30 percent PHIR, we have a policy which in 2000-01, the Commonwealth Government devoted 7 to 8 percent of its total health expenditure¹⁵ that on this evidence is shared least by families who, in terms of economic disadvantage and health states, need it most.

What can be done to assist single parent family health directly?¹⁶ One possible measure at the Commonwealth level concerns changing the conditions of eligibility for the Health Care Card. Research undertaken by Barrett using Department of Family and Community Services administrative data found that most single parents cycle on and off Parenting Payment – Single (PPS) benefits relatively quickly.¹⁷ For instance, 45 percent of all episodes of benefit receipts end within 12 months; however, most single parents experience multiple episodes over a period of time. When on PPS benefits, the single parent receives a Health Care Card that entitles the family to concessional prices for a range of health services. The single parent is able to retain the Health Care Card for 6 months after leaving PPS benefits if they had been on PPS for at least 12

consecutive months immediately prior to leaving, and if they left due to employment-related factors (such as beginning a job). If the episode of payment receipt was less than 12 months or they left for another reason (such as repartnering), the Health Care Card was not available to the family. Removing the restrictive conditions for retaining the Health Card on leaving PPS benefits, and permitting the retention of the Health Card for an extended period, may help mitigate the health disadvantages experienced by lone parent families. Along similar lines, it may be advantageous to extend other concessions such as for transport and child care services to lone parent once they leave the income support system.

Notes

- 1 This is not to underestimate the importance of funding needs for aged-care. For example, the growth in government funding for high-level residential aged care, currently more the \$3.3 billion, grew by 4.6 percent in constant prices over the period from 1997-98 to 2000-01 (Australian Institute of Health and Welfare (AIHW), (2002) *Health Expenditure Australia, 2000-01*, Canberra: Table 14, p. 20).
- 2 In 1986, 7.8 percent of families comprised a sole parent and dependent child(ren). In 1996 (the latest year for which comparable data are available) it was 9.9 percent. By 2006 this proportion is expected to grow to between 14.5 and 17 percent of all families (ABS (2002), *Yearbook Australia, 2001*, (Cat. No. 1301.0), Tables 5.45 and 5.48).
- 3 Total expenditure on health care in 2000-01 was almost \$61 billion of which more than \$42 billion (this figure includes appropriate adjustments for tax expenditures) was funded by Federal, State and local governments. The remainder was funded by individuals (about \$10.5 billion) private health insurance funds (about \$4.3 billion) and other non government sources (about \$4 billion) (AIHW 2002, Table 3.1).
- 4 In the 10 years to 2001, the average annual growth rate of health services expenditure per person was 3.2 percent, while over the same period, the growth in total health services expenditures was 4.4 percent, both in constant prices. The corresponding figure for total (Federal, State and local) government expenditure was 4.9 percent. (AIHW (2002), Tables 2, 6, 8, 9, 11 and 3.1).
- 5 The National Health Surveys of 1988-89 and 1995 are large, nationally representative surveys which collect detailed information on individuals' demographic and socioeconomic characteristics, health status, use of health resources, health risk factors and private health insurance coverage.
- 6 With family breakup, some needs such as shelter, utilities, consumer durables (eg: furniture and appliances), need to be duplicated.
- 7 i.e. Those hospitalised and/or visited casualty/ day clinic for their own health in the two weeks prior to interview.
- 8 This, like so many of the family attributes examined here, is likely to be income-related.
- 9 For two-parent families the average number of chronic conditions per child in 1988-89 was 1.38 and in 1995, 1.88; the corresponding figures for children of

- female single parents were 1.76 and 2.17. Chronic conditions are those such as anaemia, asthma, or kidney disease that have lasted, or are likely to last for 6 months or more. Other conditions more likely to affect adults are emphysema, hypertension, high cholesterol, osteoporosis, and stomach ulcers.
- 10 P. Sainsbury, Central Sydney Area Health Service, quoted in *Sydney Morning Herald*, 6 September, 2002, p. 3.
 - 11 An excellent assessment of some of the alternative explanations of the linkage between health and economic status may be found in J.P. Smith (1999), 'Healthy bodies and thick wallets: The dual relation between health and economic status', *Journal of Economic Perspectives*, Spring, pp. 145-166.
 - 12 ABS (2001a) *Government Benefits, Taxes and Household Income*, 1998-99, Cat No. 6537.0, Canberra, 2001, Tables 2, 6 and 9.
 - 13 ABS (2001b) *Household Expenditure Survey*, 1998-99, Cat. No. 6530.0, Table 7. Canberra.
 - 14 AIHW (2002) Table 17, p. 25; J.R.G. Butler (2002) 'Policy change and Private Health Insurance: Did the Cheapest Policy do the Trick? *Conference on Regulating Private Health Insurance*, ANU, Canberra, June, p. 6.
 - 15 ie: \$2.1 billion in total Commonwealth Government expenditure of about \$28.8 billion. To put this in perspective, the PHIR represented about one-half of the private insurance funds' expenditure on health (\$4.3 billion in 2000-01) (AIHW 2002, p. 22).
 - 16 Though not directly linked to family health – the most obvious means of assistance would be through increased payments under the Parenting Payment – Single benefit, and/or through adjustments to the family allowance to take account of family circumstances.
 - 17 G.F. Barrett (2002) 'The dynamics of participation in the Sole Parent Pension', *Economic Record*, 78 (204), 1-17

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