

# Health assessment findings for young males with severe emotional and behaviour difficulties in a residential setting over 24 weeks.

**Denise Carroll, T. Duffy, & C. R. Martin**

## **Abstract**

Seventy-four males aged 13-16 years old cared for by local authorities took part in this study when they were cared for in a Scottish residential centre for young people with severe emotional and behavioural difficulties. This group of vulnerable young people are known to have poor health, educational and social outcomes (Residential Care Health Project, 2004, Scottish Government, 2014). Children and young people in local authority care feature on the agenda of all aspects of public care including health, social care, criminal justice and education. It was found that 44% of the young people's health records were not available at the time of their health assessment despite the fact that young people had on average at least four previous placements prior to being admitted to the Centre. While a range of systems have been put in place to improve the health outcomes of children in care, lack of such key information may compromise the assessment process. Over three observations (at admission, 12 and 24 weeks) the young people had a comprehensive health assessment where some positive differences were found in dental intervention, vision problems, immunisation uptake, reduction in alcohol, substance use and sexual health concerns. Between the first and last assessment there was a decrease in the number of young people who have a healthy Body Mass Index (BMI).

## **Keywords**

Health assessments, male, residential care

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## **Introduction**

The health of children and young people looked after by local authorities has been of particular concern. These children feature on the agenda in all aspects of public care including health, social care, criminal justice and education (Hall, 2003; Scott and Hill, 2006; Scottish Government, 2015). Although many young people in Scotland experience deprivation and poor health, young people cared for by local authorities are an easily identifiable group with poor mental health (Meltzer, Lader, Corbin, Goodman and Ford, 2004; Scottish Government 2014) as well as poor physical health (Residential Care Health Project, 2004; Scott and Hill, 2006; Campbell, 2014).

It is normally a child's parents who would attend to general health needs on a day-to-day basis. However, it appears that children and young people in the care system experience systematic barriers to good health (Brodie, Berridge and Beckett, 1997; Scottish Government 2014). Competent parents would recognise the need for attention to health, and as such, it is unacceptable that young people who are already socially and emotionally deprived should experience further disadvantage to their health by having a 'corporate parent' who pays insufficient attention to the health needs of the children within their care.

There is strategic guidance on how to improve the health outcomes for these young people within Scottish Government policies including: Guidance on Health Assessments for Looked after Children and Young people in Scotland (2014); These are our bairns (2008); and Looked after children: We can and must do better (2007). There is recognition that young people who are looked after by local authorities have more complex health needs. Campbell (2014) acknowledges that while this may be difficult, corporate parents should be aiming for children in local authority care to have the same health outcomes as their peers and so reduce inequalities in health care.

## **Background**

It is a statutory requirement in Scotland that all young people have a comprehensive assessment of their health needs (The Children's (Scotland) Act 1995). This holistic health assessment takes place on the young person's admission into care. The format of the health assessment has evolved and been modified across the residential sector. However, the content of this assessment has been standardised through the Scottish Looked After Children's Nurse Forum and more recently the publication Guidance on Health Assessments for Looked After Children and Young People in Scotland (Scottish Government, 2014). This health assessment should not only address the health issues at the point of entry into care, but also those of the early neglect. Further, it should incorporate the family's health history and the affect this may have on the child's development. It also includes their growth, baseline vital observations, any outstanding health treatment previously identified, screening for vision and

hearing deficits, dental health status, incomplete immunisations, general physical, lifestyle and mental health needs. The outcomes from this health assessment inform the young person's care plan and the ongoing processes to ensure the follow up and conclusion to identified health needs. In this way, residential care personnel strive to take on the role of 'corporate parent'.

When conducting an initial assessment it is frequently observed that many young people may have missed out on primary care services such as immunisations and basic screening of their hearing, vision and growth prior to admission into care (Butler and Payne, 1997; Payne and Butler, 1998; Ashton-Key and Jorge, 2003; Residential Care Health Project, 2004; Meltzer et al., 2004; Scott and Hill, 2006; Hall, Lowden, Davidson and Hamilton, 2008; Scottish Government, 2014).

Findings from initial health assessments identify that one in ten of the young people suffer varying forms of ill health and twice as many have non-acute medical needs such as hearing loss, poor eyesight or impaired mobility (Residential Care Health Project, 2004; Scottish Government, 2014). Scott and Hill (2006) reported that up to 50% of Scottish looked after children had not visited the dentist in the previous year. In addition, for young people who frequently move care placement, this may impede attention to health issues (Waddell, 2007; Scottish Government 2014).

Young people in local authority care are more likely to adopt health compromising behaviours (Michell, 1997; Residential Care Health Project, 2004; Scottish Government, 2014). Meltzer et al. (2004) reported that 44% of 11-17 year old looked after young people smoke between 10-19 cigarettes per day and that 10% of all those that did smoke, smoked more than 20 per day (Meltzer et al., 2004). As in Meltzer's study 39% of these young people had tried cannabis with 21% having used it 'in the last month'. Meltzer et al. (2004) concluded that the rates of health compromising behaviours were significantly higher in the looked after than the general adolescent population. 'Across all age groups the number of looked after children identifying themselves as regular smokers and consumers of alcohol is significantly higher than the average' (Scottish Government, 2014, p.9).

It is evident that many of the serious health problems of adult life are related to childhood health factors (Lamont, 2010) and the effects of early abuse of children is related to health risk behaviour and disease in adult life (Feletti Nordenberg, Williamson, Spitz, Edwards, Koss and Marks, 1998; Scottish Government 2014). The assessment and understanding of looked after children's health needs, requires professional collaboration and a flexible approach. These assessments are mostly undertaken by specialist looked after children's nurses but may also be by a doctor or public health nurse.

Some of the challenges to providing a meaningful health assessment include the difficulty in obtaining previous health records and an accurate family history which leaves major gaps in the information about the health of the young person (Butler and Payne, 1997; Robinson, Auckland, Crawford and Nevison, 1999; Ward and Skuse, 1999; Bundle, 2002; Scottish Government, 2014). The clinician conducting the assessment aims to build a therapeutic and collaborative relationship with the young person to assess their health needs and inform their care plan.

Considering their frequent placement moves, it is essential that the health assessment informs the overall and ongoing care plan for the young person. The health assessments should detail the action required informing the young person's care plan and the health records need to move with the young person (Residential Health Care Project, 2004; Scottish Government, 2015). Otherwise, the young person could go through a series of assessments and no action will be taken on the findings.

## **Method**

### **Setting**

Participants who took part were in a Scottish residential care establishment (the Centre). This Centre is a specialist resource for young people with complex social, emotional, behavioural and educational difficulties, which may include child welfare, youth justice and mental health needs. Places are purchased by local authorities across the UK. The majority of young people will have had a history of care placements which have not been able to fully meet their needs.

### **Participants**

There was a total sample of 74 males with a mean age of 182 (SD 15.2) months.

The looked after young people comprised of two distinct groups: residential; and secure care. Both groups live and are educated at the Centre and those in the secure sector group are detained and unable to leave without appropriate authorisation.

### **Design**

All young people admitted to the Centre were offered a standard health assessment. Over an 18-month period these young people were recruited to the study. This health assessment was repeated at 12 and 24 weeks.

### **Procedure**

Ethical approval was obtained from the University of the West of Scotland and the Board of Directors at the Centre. 'Opt-in' consent was obtained from the

legal guardian at the time of admission. 'Opt-in' consent was also obtained from the young people at the point of assessment and they were free to withdraw from the study at any point.

As part of the admission process, and in preparation for the health assessment, a review of their healthcare records (where available) was undertaken for each young person. It was recorded if this health information was available at the time of assessment. All participants were offered a standard health assessment on admission, 12 weeks and 24 weeks. The follow up at 12 and 24 weeks was introduced for this study as this coincided with the natural review process for the young people at the Centre, thus minimising any additional involvement in the research for them.

Fourteen specific health conditions were assessed using three potential categories of response: 'no concerns', 'concerns raised' and 'has a diagnosis'. For dental health 'concerns raised' is when there is outstanding dental treatment, toothache or a check-up is required and this has not commenced and 'diagnosis' relates to when the treatment or appointments had been confirmed. For immunisations 'concerns raised' is when the young person requires an immunisation.

Lifestyle categories were also assessed, again using three possible categories of responses including 'non-user', 'concerns raised' or 'has been problematic'. Problematic use of drink or drugs relates to usage that had a significant contributing factor to the young person's admission into the Centre, had a negative impact on relationships with family and friends, affected their schooling, or caused problems within the community (National Institute on Alcohol Abuse and Alcoholism, 2004; Newbury-Birch, Gilvarry, McArdle, Ramesh, Stewart, Walker, Avery, Beyer, Brown, Jackson, Lock, McGovern and Kaner, 2009). When asked about alcohol, tobacco and drug use, participants were asked to reflect on their use of substances in the past month and for tobacco use, they were asked also to identify the number of cigarettes smoked per day.

A further lifestyle category focussed on participants' Body Mass Index (BMI) from measurements of their height and weight.

## **Data**

During the health assessment a small number of participants opted out of responding to specific questions. Tables that describe the population have varying numbers of participants due to the 'non responses' having been excluded.

BMI scores were calculated from participants' height and weight measurements, and then recorded on British Growth Foundation percentile charts (Child Growth Foundation, 2003). In the percentile chart <2 is underweight,  $\geq 2$ nd and  $\leq 90$ th

is considered within the healthy weight range whereas  $\leq 91$ st and  $\geq 98$ th is overweight and  $\geq 98$ th is obese.

## Results

In Table 1 it can be seen that as a group the young people had experience of at least four previous care placements with those in secure care having a higher mean of five prior placements. Thirty per cent of participants in the secure setting had previously been cared for in eight or more placements.

Young people by care group	Residential	Secure	Total
Number of young people in study	41	33	74
Mean number of previous placements	4.17	5.15	4.6
Young people who had $\geq 4$ previous placements	20 (49%)	16 (48%)	36 (49%)
Young people who had $\geq 8$ previous placements	5% (2%)	10 (30%)	12 (16%)

**Table 1:** Number of previous placements experienced by the young people

As all the young people in the Centre had at least one previous placement in the care of the local authority, previous health assessment records ought to have been available at this important transition period. In this study, health records were available for 56% of participants with such information being available for only 51% of the young people in residential care and 63% in secure care at the time of admission.

These health assessment results are presented for the three observations in Table 2. The responses were presented for each specific health condition.

Health assessment findings for young males with severe emotional and behaviour difficulties in a residential setting over 24 weeks.

	Admission n=74 % (number of young people)		12 weeks n=74		24 weeks n=74	
Health condition	concerns raised	diagnosis	Concerns raised	diagnosis	concerns raised	diagnosis
<b>Allergies</b>	9 (7)	0	9 (7)	0	9 (7)	0
<b>Dental</b>	39 (29)	32 (24)	34 (25)	30 (22)	1 (1)	18 (13)
<b>Feet problems</b>	12 (9)	4 (3)	5 (4)	7 (5)	4 (3)	7 (5)
<b>Gastrointestinal track</b>	5 (4)	0	1 (1)	1 (1)	3 (2)	3 (2)
<b>Hearing problems</b>	4 (3)	4 (3)	3 (2)	4 (3)	1 (1)	3 (2)
<b>Musculoskeletal</b>	9 (7)	1 (1)	4 (3)	1 (1)	3 (2)	5 (4)
<b>Neurological</b>	9 (7)	3 (2)	4 (3)	1 (1)	4 (3)	5 (4)
<b>Renal system</b>	8 (6)	5 (4)	5 (4)	8 (6)	4 (3)	4 (3)
<b>Respiratory</b>	15 (11)	11 (8)	8 (6)	12 (9)	7 (5)	12 (9)
<b>Skin problems</b>	22 (16)	12 (9)	7 (5)	19 (14)	9 (7)	20 (15)
<b>Sleep difficulties</b>	24 (18)	5 (4)	18 (13)	4 (3)	14 (10)	8 (6)
<b>Speech &amp; language</b>	0	0	4 (3)	1 (1)	1 (1)	1 (1)
<b>Vision problems</b>	18 (13)	24 (18)	7 (5)	14 (10)	7 (5)	9 (7)
<b>Immunisations</b>	54 (40)		46 (34)		12 (9)	
Lifestyle factors	concerns raised	problematic	concerns raised	problematic	concerns raised	problematic
<b>Alcohol misuse</b>	41 (30)	32 (24)	24 (18)	8(6)	22 (16)	5 (4)
<b>Substance misuse</b>	49 (36)	19 (14)	24 (18)	7 (5)	19 (14)	3 (2)
<b>Sexual health concerns</b>	91 (67)		46 (34)		14 (10)	
% (number of young people )						
<b>BMI percentile (underweight)</b>	0		0		0	
<b>BMI percentile (normal weight )</b>	61 (45)		55 (40)		50 (36)	
<b>BMI percentile (overweight)</b>	16 (12)		21 (15)		25 (18)	
<b>BMI percentile (obese)</b>	23 (17)		25 (18)		25 (18)	
<b>Smoker (current)</b>	69 (51)		47 (35)		45 (33)	
<b>% of smokers, smoking ≥20 per day</b>	14 (7)		0		0	
<b>No of cigarettes smoked per day</b>	9		9		6	

**Table 2:** Health assessment findings from looked after young people

There was a reduction in the number of concerns that were brought to the first health assessment. This was noted in gastrointestinal system, feet, hearing, musculoskeletal, neurological, renal and respiratory conditions. At first assessment 24% of young people in residential care raised concerns about their sleep difficulties but this reduced to only 14% at third assessment. In addition there was a reduction in the number of young people requiring dental treatment, increased immunisation uptake, reduction in vision problems over the three observation points.

The lifestyle data is presented in Table 2 and shows that 69 per cent of the young people smoked at the time of admission and the number of cigarettes they smoked ranged from four to 40 per day, with 65% smoking 10-15 per day and 14% smoking 20 or more daily. At the third observation (24 weeks) there is a reduction in the numbers smoking (45%) although this figure is skewed since participants in the secure group did not have access to tobacco. Similarly, there was a reduction in the number of young people who misused alcohol and drugs, but again it is important to note there is no access to these substances in the secure unit.

At the initial observation, concerns were raised about the sexual health of 91% of young people. At week 24 this had reduced to 14%.

The body mass index (BMI) is a calculated measurement of the young person weight relative to their height and age. No young person admitted to the Centre had a BMI in the underweight range. Sixty-one per cent of the participants in this study had a healthy BMI on admission to the Centre. There was a decrease in this number with a healthy BMI over the 24 weeks to 50%.

## **Discussion**

This Centre is for young people with severe emotional and behavioural problems and places at the Centre are usually sought when all other options have been exhausted. The findings of this study should be considered in the context that on average, this group of looked after young people had at least four previous care placements prior to admission to the Centre and 30% of those in secure care had eight or more.

In the initial health assessment conducted on admission, young people's medical history is informative, if not essential, in providing a basis for the care planning process that follows. An important finding of this study is that only 56% of these young people had their medical information available at the time of initial assessment. As these young people are not new to the care system, the information from previous comprehensive health assessments should be available to those who subsequently take on corporate parenting responsibility (i.e. the 'Centre' care staff). The lack of this information at initial assessment results in a further comprehensive assessment being conducted which is an

inefficient use of staff time as well as poor health care practice, particularly since earlier healthcare issues may not have been followed-up appropriately. The function of the health assessment is to inform a health care plan for the young person.

The care plan is a live document directing the carers on the action required to meet the needs of the individual young person. Consequently, the care plan must be shared timely with the current corporate parent to ensure continuity of care.

The uptake of the universal health services provides an indicator to compare the health of looked after children and young people to that of their peers. Immunisation rates have been fairly consistent in Scotland, ranging from 93.0% to 98.2% across the different age bands and vaccines (Information Services Division, 2015). Only 46% of the young people in this study were fully immunised on admission; however, by week 24 this had risen to 88% being fully immunised. It would appear from the data that meeting the health needs of this group had not been achieved prior to admission. The findings would suggest that it is the care system itself that is failing to address the health needs of the children once they are in care. That is, the immunisation services should have been implemented earlier in the young people's lives by previous corporate parents.

In respect of the uptake of dental health, vision and immunisation screening, it can be seen that, with support, these young people can be encouraged to access universal services. Also, of the 24% of the young people who had raised concerns about sleep difficulties at initial assessment, only 14% noted this as problematic in week 24. The Centre may be providing the young people with the time out of their chaotic lifestyles to attend to their routine health needs. This uptake of universal services could be attributed to the relationships young people build with staff where 'children's lives are directly and profoundly affected by the quality of the corporate parent offered to them' (The Scottish Government, 2008, p.5).

Generally, teenagers are healthy, however, the behaviours they adopt as young people may have an adverse effect on their health in adulthood (Residential Care Health Project, 2004; Scottish Government, 2014). Young people in the care system are more likely as a group to be involved in lifestyle behaviour that are harmful to their health such as smoking, excessive alcohol consumption and drug misuse (Scott and Hill, 2006). Not only is there a high up-take of such behaviours, but young people in care are also likely to have an accumulation of problematic behaviours (Farruggia and Sorkin, 2009) and consequently a cumulative effect of these behaviours may be putting their health at more serious risk.

It is of further concern that almost all the young people had either worries about their body development, had missed their sexual health education, or stated the need for STI screening. Between the first and third observation there was a significant reduction in these concerns from 91% to 14 %. Within this Centre, there is a range of services provided by the NHS (National Health Service) which supports education, screening, contraception and fast tracking and liaison with in-house provision. This collaborative approach to providing health education and increased access to services may have contributed to the significant reduction in sexual health concerns expressed by this vulnerable group of young people by week 24.

These children have come from public care placements with corporate parents and yet there seems to be a high prevalence of poor lifestyle behaviours being adopted by the young people. For example, 69% of the young people smoked on admission to the Centre. Smoking is one of the major health harming behaviours (ASH Scotland, 2010).

Additionally, 41% of the young people had raised concerns either by themselves or by those caring for them about their current alcohol misuse, and a further 32% had 'problematic' drinking that was a significant contributing factor to their care placement. Similarly, with drug use, almost half (49%) had 'concerns raised' either by themselves or those caring for them about their current drug misuse, and almost an additional fifth (19%) had drug misuse problems that were considered as 'problematic' by those caring for them and contributed to their placement at the Centre. It is noteworthy that the young people in the secure unit were unlikely to have had access to substances and these figures are skewed by the environmental factors that are curtailing the young people.

In 2015, 72% of Scottish males (12-15 years) had a BMI in healthy range (Scottish Government, 2015). In this study for the looked after males, 61% of the participants had a healthy BMI on admission but this reduced to 50% within 24 weeks of being in the Centre. There was also an 11% increase in the number of young people in the Centre being assessed as being overweight or obese. There are many factors which could contribute to explaining such changes. For example Cox, Emond, Punch, McIntosh, Hall, Simpson and Skouteris, consider obesity as a complex issue and more a symptom of children who have experienced trauma and abuse (2017). Other factors may include, some of the young people modifying other lifestyle factors such as stopping smoking, alcohol and substance misuse which may have impact on their food intake and metabolism (Hadfield, 2008; ASH Scotland, 2014). The health assessment provides the opportunity to assess the young person and compile a care plan identifying who is responsible for implementing actions and timescales to ensure the young person's complex and wide reaching health needs are met. There was evidence that the health assessment outcomes were being addressed with reductions in the health issues and in lifestyle topics of alcohol and substance

misuse. Longitudinal research is required to inform the sustainability of the changes in lifestyle beyond being in this Centre and being in care. The findings of this study should be further investigated to establish if the uptake of universal health provision in immunisations and dental care are related specifically to this Centre, as there may be features within the Centre that could be replicated elsewhere.

However, there are outcomes in some of the lifestyle related health such as weight gain which would be worthy of attention. This should be reviewed across all looked after children and young people's services and measures taken to address this.

The author acknowledges the relatively small and gender specific sample of the young people as limitations of this study. However, this study does show for the client group that health assessment is fundamental to recognising and focusing on the health needs of the young people without which difficulties may have gone unrecognised. As a matter of priority, clear systems of responsibility and accountability should be implemented to ensure young people's medical information is 'transferred' between care placements. The health assessment and processes of interventions that followed has shown an improvement in the health of looked after children and young people on a number of health indicators. Comprehensive health assessment and interventions are a commitment from the Scottish Government to reduce the inequalities experienced by looked after children and young people (Scottish Government, 2014). The roles of the looked after children's nurse and care staff, as corporate parents, are crucial to this process.

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## **About the author**

Denise Carroll is a specialist nurse working in residential and secure care. Trained as a paediatric nurse Denise has worked with vulnerable children for over 30 years as a health visitor and public health practitioner both delivering and setting up services. Denise's PhD focused on the anxiety, depression and the health needs of young people in residential care.

## **References**

ASH Scotland (2010). *State of the nation: Measuring progress towards a tobacco-free Scotland*. Retrieved from [www.ashscotland.org.uk](http://www.ashscotland.org.uk)

ASH Scotland (2014). *Stopping smoking: The benefits and aids to quitting*. Retrieved from [http://www.ash.org.uk/files/documents/ASH\\_116.pdf](http://www.ash.org.uk/files/documents/ASH_116.pdf)

Ashton-Key, M. and Jorge, E. (2003). Does providing social services with information and advice on immunisation status of 'looked after children' improve uptake? *Archives of Disease in Childhood*. 88(4), 299-301.

Brodie, I., Berridge, D. and Beckett, W. (1997). The health of children looked after by local authorities. *British Journal of Nursing*. 6(7), 386-390.

Bundle, A. (2002). Health of teenagers in residential care: comparison of data held by care staff with data in community child health records. *Archives of Disease in Childhood*. 84,10-14.

Butler, I. and Payne, H. (1997). The health of children looked after by local authority. *Adoption and Fostering*. 21(2), 28-35.

Campbell, A (2014). Ministerial forward in Scottish Government 2014. *Guidance on Health Assessments for Looked after Children and Young People in Scotland*. Retrieved from <http://www.gov.scot/Resource/0045/00450743.pdf>

Child Growth Foundation (2003). *Body Mass Index Reference Curves for the UK 1990*. Child Growth Foundation, London, UK.

Children (Scotland) Act 1995, London: HMSO Retrieved from <http://www.gov.scot/resource/doc/26350/0023698.pdf>

Cox, R., Emond, R., Punch, S., McIntosh, I., Hall, K., Simpson, A., & Skouteris, H. (2017). "It's not as easy as saying, 'just get them to eat more veggies'": Exploring healthy eating in residential care in Australia. *Appetite*. Vol. 117, 275-283.

Farruggia, S.P. and Sorkin., D.H (2009). Health risks for older US adolescents in foster care: the significance of important others' health behaviours on youths' health and health behaviours. *Child: Care, health and development*. 35(3), 340-348.

Felitti, V. R., Nordenberg, D., Williamson D., Spitz, A., Edwards, V., Koss, M. and Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences study. *American Journal of Preventative Medicine*. 14,245-258.

Hadfield, S. C. and Preece, P. M. (2008). Obesity in looked after children: is foster care protective from the dangers of obesity? *Child: Care, Health and Development*, 34: 710-712. doi: 10.1111/j.1365-2214.2008.00874.x

Hall, D.M.B. (2003). Health for all children. In D.M.B Hall and D. Elliman (Eds), *Health for all children*. Oxford: University Press, Chapter 14.

Hall, S., Lowden, K., Davidson, J. and Hamilton, S. (2008). *Schools survey: health and wellbeing of S1-S4 pupils in new learning community schools in Glasgow City*. NHS Greater Glasgow and Clyde Public Health Resource Unit.

Information Services Division (2015). *Childhood immunisations statistics Scotland*. Retrieved from <https://www.isdscotland.org/Health-Topics/Child-Health/Publications/2015-12-15/2015-12-15-Immunisation-Summary.pdf?65179079772>

Kline, P. (2000). *The handbook of psychological testing*. 2nd ed . New York: Routledge.

Lamont, A. (2010). *NCPC resource sheet: effects of child abuse and neglect for children and adolescents*. Retrieved from <http://www.aifs.gov.au/nch/pubs/sheets/rs17/rs17.html>

Meltzer, H., Lader, D., Corbin, T., Goodman, R. and Ford, T. (2004). *The mental health of young people looked after by local authorities in Scotland*. London: National Statistics TSO.

Michell, L. (1997). Loud, sad or bad: young people's perceptions peer groups and smoking. *Health Education Research*. 12(1),1-14.

Newbury-Birch, D., Gilvarry, E., McArdle, P., Ramesh, V., Stewart, S., Walker, J., Avery, L., Beyer, F., Brown, N., Jackson, K., Lock, C.A., McGovern, R. and Kaner, E. (2009). *Impact of alcohol consumption on young people: a systematic review of published reviews*. Department of children, schools and families. Newcastle University. Research Report DCSF-RR067.

Payne, H. and Butler, I. (1998). Improving the health care process and determining health outcomes for children looked after by the local authority. *Ambulatory Child Health*. 4 (2),165-172.

Residential Care Health Project (2004). *Forgotten Children: addressing the health needs and issues of looked after children and young people*. Edinburgh: Astron.

Robinson, P., Auckland, K., Crawford, H. and Nevison, C. (1999). Care sick: the physical and mental health needs of a sample of young people in local authority residential care. *Public Health and Inequalities*. Young people's unit. Royal Edinburgh Hospital: Scottish Executive.

Scott, J. and Hill, M. (2006). *The health of looked after and accommodated children: Messages for research*. Edinburgh: Social Work Inspection Agency.

Scottish Executive (2007). *Looked after children and young people we can and must do better*. Retrieved from <http://www.scotland.gov.uk/Publications/2007/01/15084446/0>.

Scottish Government (2008). *These are our bairns a guide for community planning partnerships on being a good corporate parent*. Edinburgh: Crown Copyright.

Scottish Government (2010). *Implementation of action 15 of the looked after children and young people: We can and must do better report*. Chief Executive Letter 16 (CEL 16). Retrieved from [http://www.sehd.scot.nhs.uk/mels/CEL2009\\_16.pdf](http://www.sehd.scot.nhs.uk/mels/CEL2009_16.pdf).

Scottish Government (2011). *Scottish schools adolescent lifestyle and substance use survey 2010*. Retrieved from [http://www.drugmisuse.isdscotland.org/publications/local/SALSUS\\_2010.pdf](http://www.drugmisuse.isdscotland.org/publications/local/SALSUS_2010.pdf)

Scottish Government (2015). *Scottish Health Survey 2015*, Chapter 6 Obesity. Retrieved from <http://www.gov.scot/Publications/2016/09/2764/downloads#res505810>

Scottish Government 2014. *Guidance on health assessments for looked after children and young people in Scotland*. Retrieved from <http://www.gov.scot/Resource/0045/00450743.pdf>

Scottish Government (2015). *Getting it right for looked after children and young people. Early engagement, early permanence and improving the quality of care*. The Scottish Government, Edinburgh. Retrieved from <http://www.gov.scot/Resource/0048/00489805.pdf>

Waddell, B. (2007). *The dental health of looked after and accommodated children and young people in Scotland – a literature review*. Retrieved from <http://hdl.handle.net/1905/735>.

Ward, H. and Skuse, T. (1999). *Looking after children: Transforming data into management information: report on the first year of data collection*. Totnes: Dartington Social Research Unit.

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