

**A review of the health service needs of children residing in
refuges for women fleeing domestic abuse in Cardiff.**

Dr Rachel M Brooks MBChB DCH MSc PCME FHEA

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Abstract

Introduction

Domestic abuse puts children at risk. There is evidence that the health of these children is compromised. This thesis aims to explore whether specific health services to children living in refuges with their mothers who have fled domestic abuse should be targeted at this group.

Method

The epidemiological, comparative and corporate methods of health care needs assessment were used. Evidence for effective interventions to address the key health issues for this group of children was sought. Few other service models could be found against which to directly benchmark. Guidance for services to children in these circumstances was thus included in the review as a comparator. Professionals and Mothers were interviewed to explore their perspective on the needs of these children.

Results

Children in refuge have an increased risk of mental health problems and poor access to health services. They are more likely to have suffered maltreatment themselves. Refuges in Cardiff provide assessment and a programme of work and support for children. The specialist health visitor role uncovers unmet health needs in the under 5s. Professionals working with these children and their mothers are concerned about their mental health and are looking for more specialist CAMHS (Child and Adolescent Mental Health Service) help. A number of barriers stand between children and the health services they need. Referral criteria are not clear and timeliness of services and continuity of care is an issue for mobile families.

Conclusions

A model for health service is suggested for children in refuge using the logic model method. The Primary Mental Health Worker role should provide the advice and expertise Tier 1 workers require and demystify the referral criterion for specialist CAMHS. Timing and continuity of care for appointments requires joint decision making and a flexible service. Health staff requires training to provide an acceptable and accessible service to vulnerable families.

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Abbreviations

ADHD	Attention deficit hyperactivity disorder
BAWSO	Black and Asian women stepping out
CAFCASS	Children and family court advisory and support service
CAMHS	Child and adolescent mental health service
CEMACH	Confidential enquiry into maternal and child health
CHS	Child health system
CTS	Conflict tactics scale
CWA	Cardiff Women's Aid
CHVHB	Cardiff and Vale University Health Board
FHW	Family health worker
GHQ	General Health quotient
HADS	Hospital anxiety and depression scale
HB	Health board
HOME	Home observation for management of environment
HoNOSCA	Health outcomes scale for children and adolescents
HSNA	Health service needs assessment
IPV	Inter partner violence
IQ	Intelligent quotient
LBW	Low birth weight
NGO	Non governmental organisation
NICE	National institute for health and clinical excellence
ONS	Office of national statistics

PARIS	Primary Access Regional Information Sharing
PTSD	Post traumatic stress disorder
SAM	Severe acute malnutrition
WAFE	Women's aid federation of England
WAG	Welsh assembly government
WWA	Welsh women's aid

Chapter1. Introduction

The aim of the research

This study sets out to explore the health service needs of children living with their mothers in refuges for women fleeing domestic abuse in Cardiff. It aims to propose a model of health care provision that might meet those needs and a plan for how that model would be evaluated.

The problem statement, background and rationale for undertaking the study

Professional background

In 1995 I was completing the taught part of an MSc in Community Child Health at what was then the University of Wales, College of medicine, Cardiff. As a Community paediatrician I had chosen a course that was set up to increase the evidence base in community child health, which was a relatively new area of paediatrics. Lack of inspiration for a dissertation title led me to sit down with my personal tutor Dr Elspeth Webb to mull over some ideas. Dr Webb mentioned a group of children, those living in refuges for women who were fleeing domestic abuse about whom we knew very little. I realised that I knew nothing about these children or domestic abuse itself and in order to produce a dissertation on this topic I first had to read widely to discover what domestic abuse was and women's experience of this. I had to study the history of services for these women and then what was known about how this affects their children.

What I found is included in later sections of this work, but importantly it became clear that back in 1994 there was little in the way of literature about the children in these families. The literature that I found was mostly from North America and this remains the most prolific geographical area for research into this group of children. I began to notice that when you put domestic abuse on your radar it began to be mentioned when we were reviewing children who had presented via Social Services for medicals following concerns regarding child abuse. The overlap between child abuse and domestic abuse was becoming clearer. The study for my MSc dissertation is mentioned below and forms a key part of the evidence for the health care needs for this group of children. A larger study with a group including Dr Elspeth Webb and Dr Meirion Evans with grant monies from The Wales Office for Research and Development in Health and Social care and the Sanoffi-Winthrop Foundation followed on which provided some more data on this largely unstudied group. Since my dissertation I have been fortunate to be able to raise the profile with paediatricians of these children with invited lectures and a handful of publications.

This ambitious piece of work fits clearly with the questions raised by my studies, my experience of working with the women's refuge movement and my work in the safeguarding arena. As a paediatrician I need to know what to do about a child presenting where domestic abuse may be part of the picture. However the wider public health question of how we help these children as group is also important to me. As these children come

through refuge, is this a good place to intervene and what should health services be doing that will be both effective and efficient?

Empirical framework

In 1996 the author submitted a dissertation for an MSc in Community Child health at University of Wales College of Medicine. This showed that although there was beginning to be increasing concern about the impact of domestic abuse on children as well as on the abused partner there was little research evidence to explore or measure these effects. Most of the sparse literature was from the USA.

A small comparative study looking at the immunisation rates and pre-school health surveillance coverage of 71 children in Cardiff refuges was performed. This showed that these children had significantly poorer recorded immunisation rates not only than the general population of Cardiff but also than the General Practice with the worst immunisation coverage rates within Cardiff. The recorded pre-school surveillance was even more significantly poor. This study raised issues about the access to health care for these children, nearly one third of the children were not registered with a local GP. It suggested that these children were at risk of preventable infectious disease and late diagnosis of remediable physical and developmental problems.

A pilot group interview study was also performed which asked a small group of mothers in refuge about the health of their children. As a pilot the results could not be considered robust, however they revealed that the main concern of all the mothers in the group regarding their children's health was their behaviour. It served to remind the author that the priorities for health professionals and for mothers might not coincide^[1]. This point is relevant in the exploration of the health care needs of any group as services provided and their aims must be viewed as valuable and relevant to clients in order to be successful ^[2].

On February 14th 2012 Welsh Women's Aid (WWA) were supporting 215 women and 174 dependent children and young people in 31 refuges. In addition WWA was supporting 1579 women and 1209 children in the community^[3]. In the year 2010-2011 Cardiff Women's Aid (CWA) had 127 children and young people staying in refuge with their mothers and 4 16-18 year olds accessing the refuges independently^[4]. Within Cardiff there are also refuges run by the Black Association of Women Stepping Out (BAWSO) who provided refuge and community support services for women from Black and Ethnic Minority groups.

Social and historical background

Spouse abuse is an age-old phenomenon. Until the fairly recent history physical chastisement of one's wife was considered acceptable behaviour in Britain. It was only in the 1970s that 'wife-battering' came to media attention and the first refuge was opened in Chiswick following the example of those recently opened in America.

Following on from the increasing concern for women in abusive relationships there has been a realisation that children do not escape the impact of domestic abuse. There have been efforts to measure the impact on children.

There are a number of definitions of domestic abuse. One example is that domestic abuse is

‘...any violent or abusive behaviour (whether physical, sexual, psychological, emotional, verbal, financial Etc.) which is used by one person to control and dominate another with whom they have or have had a relationship.’^[5]

Although Domestic Violence is a term that is perhaps most universally understood it does not represent the totality of the experience of the abused partner. Therefore many in this field feel strongly that the term Domestic Abuse is preferable. For the women and children involved it is not just the violence that has an impact. They also can be controlled and dominated in an abusive way. Therefore the term Domestic Abuse will be used throughout this study. If however a study described has concentrated on Domestic Violence I.E physical violence only in its case definition then this term will be used to make that distinction. For studies from the USA the term Inter Partner Violence (IPV) is also used.

In the decade before the first refuges opened for ‘battered wives’ the term the ‘battered baby’ had been put forward by Henry Kempe ^[6]. This began a realisation that parents were physically harming children and that they were presenting to the medical profession. Following this has come the understanding that children are not only abused physically by their parents but may also be abused sexually or emotionally or suffer from neglect. The development of child protection interagency working for children at risk has been informed by cases where protection has failed to prevent a death or serious injury to a child. It has been recognised that there is not only significant overlap between Domestic Abuse and other forms of abuse in a household but that witnessing violence could be emotionally abusive in itself. Therefore Domestic Abuse is included in interagency guidance to safeguard children ^[7].

Prevalence of domestic Abuse

Measuring the prevalence of domestic abuse is hampered by problems with definition. Some studies and contexts will concentrate on the physical aspects of abuse excluding the wider definitions and constituents of the abusive behaviour. Women may hide their abuse rather than reveal it or fail to name or admit to themselves the abusive nature of their relationship.

The British Crime Survey found that 25% of women had suffered domestic abuse at some time in their lives ^[8]. The evaluation of the Women’s Safety Unit in Cardiff in 2003 interviewed 222 women accessing their services. 83% of these clients had one or more child, 57% had 2 or more children^[9].

For the year 2010-11 Cardiff Women’s Aid had 127 children passing through their refuges with their mothers and 4 16-18 year olds accessing the refuge independently^[4]. Cardiff Women’s Aid is committed to a maximum length of stay of 12 weeks by which the family is supported into a more permanent solution or may return home. However the support from

Cardiff Women's Aid continues into the community and can be accessed by women living in the Community. All women and children entering refuge are fleeing an abusive home. It has been argued that the population in refuge is not an exact proxy for families enduring domestic violence in the wider community. There is some evidence that the families that come to refuge have endured more severe abuse and may be families with less financial and social stability^[10].

Theoretical framework

- No child should live with domestic violence because it places their short and long term emotional well-being at risk
- No child should live with domestic violence because it places their physical well-being at short and long term risk
- The effect of domestic violence includes direct physical and emotional risks of involvement in and awareness of violent events. It also includes the physical and emotional risks of impaired parenting and may include the effects of an unpredictable mobility.
- The refuge population may be a proxy for children living with domestic violence in the community
- The time a child spends in refuge is a valuable and timely opportunity to provide health care services.
- Healthcare services provided or initiated whilst a child is in refuge will improve the long-term health of that child.

The English National Service Framework for Children states that a marker of good practice is that 'Primary care trusts and Local Authorities tailor health promotion services to the needs of disadvantaged groups, including children in special circumstances, identified through local population needs assessment. 'Children in Special Circumstances' include 'children living with domestic violence family conflict'^[11].

The Welsh NSF specifically describes 'Children in Special Circumstances' as including children living in refuges. It says these children 'should be identified locally ideally through the health needs assessments carried out to inform the Health, Social care and Well-being Strategies'^[12].

Health service resources are finite and stretched thinly. Proposing a large change requiring significant resources and proposing gold standard care might feel worthwhile and exciting especially if founded on good research evidence. However it is not at all certain that the evidence will be there and it is surely the case that resources will be in short supply. Stevens and Raftery advise keeping the 'context of scarce resources' in mind where appropriate

throughout in order for a health service needs assessment to be most useful to budget holders ^[13].

In keeping an open mind about whether current services may or may not be adequate in the beginning there is a hope that they may at least turn out to be a solid foundation. Finding that small changes within current service provision, relatively low cost or redistributing current resources might be solution seems to be a preferred result. Enthusiasts for helping this group of children might feel this is just tinkering around the edges of the problem. It may be however that it is not children's health services that are the key factors in improving the health of this group.

Models of care

A model of care is 'a multifaceted concept, which broadly defines the way health services are delivered.' ^[14]. It can be described as 'an overarching design for the provision of a certain type of health service that is shaped by a theoretical basis, evidence based practice, and defined standards' ^[15]. It can be described under the following headings.

Structure

- The characteristics of the personnel, hospitals and clinics

Process

- Components of the encounter between a doctor or other health care professionals and a patient

Outcomes

- These should indicate benefit to the patient

This is a framework based on a service much narrower in focus than being considered here. The model for the children in refuge could be described as a complex intervention. It is not a service for one specific disease in a specified population but a time limited intervention targeting a number of health problems during a significant life event for a family. Services just to reduce child maltreatment in at risk families have been described as complex ^[16] and health services to children in refuge potentially target more than this albeit mental health care is a significant part of safeguarding. Dalzeil et al describe using the Programme Logic Model for Complex interventions to evaluate their success. Their systematic review of interventions to prevent child maltreatment used this model to analyse studies and compare effectiveness. They report that interventions which followed this model were more likely to be effective and cost-effective ^[17]. This is a method which uses the information collected in a health service needs assessment and sits comfortably alongside such a data collection method. See Fig 2.

Rogers describes Complicated and Complex interventions. Complicated interventions have lots of parts but if all in place outcomes are reasonably certain. Complex interventions are those where there is uncertainty and include the idea of emergence, which is that ways of achieving objectives may reveal themselves during the intervention. The elements of interventions for children in refuge that she would describe as complicated are;

- Multi-agency working
- Multiple simultaneous causal strands

E.g. Services to address family safety, housing, mothers' mental health issues and thus parenting capacity alongside services to address more directly a child's mental health problems. All might be necessary to reach the outcome of improved mental health for the child

- Alternative causal strands

What works may be different in different contexts. This might be taking into account for example the age of the child.

Complexity is described as

- Recursive causality

There is not a linear uni-directional relationship between initial outcomes and late outcomes.

- Emergence

The interventions that need to be adaptive and evaluation which needs to do the same, appropriate for problems that seem intractable and where specific outcomes and the means to achieve them become apparent during the implementation.

Complex Logic models are discussed for large scale interventions and for a variety of settings including those in healthcare. It may seem an over 'complicated' model for looking at a relatively small service to a small population in refuge in Cardiff.

However it could be argued that the evidence that we have is that all the health issues for the children in refuge are multi-factorial, some of which can be tackled by changes to health provision, most of which depend on multi-agency work. No simple model or intervention on its own will be enough to provide real benefit.

This group of children lives with similar health issues out in the community before they come to refuge, possibly between visits to refuge and after a stay in refuge. All services provide care at all points although a stay in refuge may bring domestic abuse out into the open for services for the first time. The same staff may work together for children in all settings. It could be that a model of service for working with children in refuge is in fact a

complex model in one context, which should be part of a wider model to provide services to families with complex social needs, which includes violence.

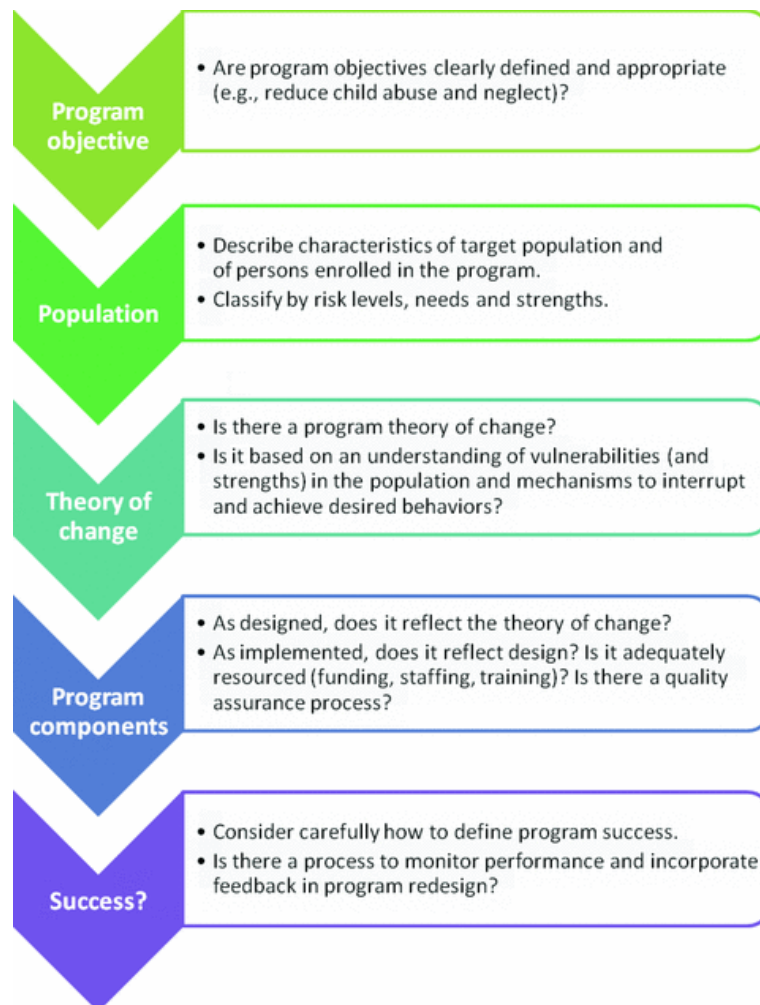


Fig 1. Programme Logic Model for Complex Interventions taken from Dalzeil et al

The programme objectives should flow from the evidence of the impact of domestic abuse on the health of children. They take into account what is known about prevalence and the evidence from the literature and from stakeholders which gives informs prioritisation

The theory of change should describe why particular activities are expected to lead to the intended outcomes in the short and long term. This section covers the final step in the Programme Logic Model for Complex Interventions; that of defining success and planning a cycle of evaluation which allows for ongoing service improvement. This enables development of the model using outcomes measures to evaluate success. A model based on limited evidence has to allow for development when more information becomes available and all interventions should be subject to regular review.

Measurement can be made of process, which is implementation of a service or outcomes in order to assess effectiveness.

Chapter 2 Literature Review

The aim of this study is to propose an effective model to meet the health service needs of children resident in refuge a refuge for women fleeing domestic abuse.

In order to begin the following questions will be addressed in this literature review.

1. How does living with, and fleeing from, domestic abuse impact on the health of children?

And

2. What are the mechanisms by which any impact occurs?

These are helpful in understanding the health needs that this group of children might have over and above the average child in terms of

- Extra health needs
- Population health needs that might need to be met differently in some way if universal provision is not proving to be effective.

2.1 Search strategy

Early exploration of the literature reveals that the data for this literature review and for the collection of evidence as part of the health service needs assessment would be present in many cases in the same papers. A wide search strategy was thus used to capture literature that might be useful to the project as a whole and stored in an Endnote database. The author then ran supplementary searches of this database for each section of the write up. As an understanding of the areas that needed exploration developed through the study this required further searches with multiple terms to capture all the data needed. A system of noting data or narrative that might be needed for another section of the write up was devised using a project chart and the backup of a skeleton project into which study names could be written against the chapter or subheading for future reference.

Databases searched included Pubmed, Psych info via Ovid, ASSIA, Cinahl, Scopus and Web of Knowledge. Automatic alerts were set up via Scopus and Pubmed. The nature of this write up required returning to the databases when a new area of interest emerged. The search strategy is tabulated in appendix 1.

Searches were run back to the beginning of 1970, as this was the decade of the first refuge for women fleeing Domestic violence and the very beginning of studies looking at these women. This strategy showed that papers including data about their children began to emerge slowly late in that decade. The search was run until the end of 2008 with alerts set and reviewed until July 2012.

All studies of any evidence levels in English language papers were included for consideration. As knowledge and concern about domestic abuse has spread more widely papers have begun to document the prevalence and sequelae of domestic abuse in an increasing number of countries. This piece of work, as far as was possible, includes studies from North America and Australia and the UK as these provide evidence from within a cultural context not dissimilar to the UK.

2.2 The mechanisms by which the health of children may be affected by living with domestic abuse.

Evidence suggests that domestic abuse impacts on the emotional and physical well being of children. The reasons that their health may be compromised are complex; it is difficult to consider each factor in isolation in that families live with a unique combination of disadvantage as a result of their own characteristics, environmental factors and the sequelae of the domestic abuse. Common factors that can be identified include the mental well being of the mother, parenting capacity, homelessness and the “dangerousness” of the home.

Structure of review

This review will begin at the very earliest stage that the health of a child can be affected, which is during pregnancy. It will then proceed to discuss domestic abuse and parenting, the concept of the ‘dangerous home’, access to health care and homelessness.

2.3 Domestic Abuse and Pregnancy

A mother who is healthy in mind and body has the optimum ability to conceive, carry and care for her child. Her health status can impact on the in utero development of the foetus and the subsequent health and well being of the child. Her health care behaviours regarding utilising services for herself and her family will influence the health of her children and thus their need for health services.

Pregnancy is associated with an increased likelihood of violence either de novo or an exacerbation of the severity of existing violence in a relationship. Holden in his taxonomy of domestic abuse regards pregnancy as a ‘period of heightened risk’^[18]. Mezey in her review of the characteristics of domestic abuse in pregnancy concludes that it is in this period that violence can first emerge in a relationship or escalate, although for some women it may decrease. She also describes those studies that document a change in the sites of injury to

include the breasts and pregnant abdomen^[19]. At this time the foetus may be the 'direct target'^[18].

Whilst most studies look at incidents by collecting data from women Burch describes a study asking male perpetrators about violent incidents towards their partners. A validated questionnaire was used and satisfactory inter-rater reliability of scoring responses is reported. The violence they describe is probably an underestimate of episodes. Despite this, men who admitted to violence towards their partner whilst pregnant also described more severe and frequent incidents^[20].

The reason for the increased incidence of violence during pregnancy is not straightforward nor within the remit of this study but authors postulate ideas such as jealousy toward the foetus and fear of being 'cuckolded'^[19, 21] which resonates with the generally accepted understanding that the root of domestic abuse is about power and control^[5].

The mechanisms by which domestic abuse can impact on the health of the mother and thus the health of her child are not merely those of a violent blow to the abdomen or a fall. A number of factors need to be considered. The mechanisms for discussion are:

- Violence to abdomen from blows or falls
- Emotional consequences of fear and stress
- Health behaviours associated with abusive relationships that put the foetus at risk, such as drug and alcohol abuse.
- Poor utilisation of health services in the ante-natal period

These need to be considered in the context of this studies key question – what are the needs for child health services?

As Sharps noted in a recent review of American studies about domestic abuse and pregnancy there are difficulties in comparing findings for several reasons. There are differences or uncertainties about the definition of domestic abuse. Some studies include cases only where there is physical violence, some include emotional abuse in their inclusion criteria, and many do not include sexual violence. Therefore the sample in many studies is an underestimate^[22] and the controls may include abused women.

Some studies use a validated tool for collecting data such as the Abuse Assessment Screen or the Conflict Tactics Scale others use one or two questions of variable validity.

The method of collecting data may be a questionnaire at home with the risks of confidentiality being breached or questionnaires in clinic or interviews in confidential hospital settings. The quality of this experience in terms of promoting disclosure is key particularly to prevalence data but will of course impact on data requiring cases and controls to discover pregnancy complication rates and post natal outcomes. Women who hide their

abuse from researchers put themselves into the control group and therefore dilute any impact of domestic abuse in subsequent statistical analyses.

The time period within which women are asked to disclose abuse also varies. Some use a year around pregnancy, some just the pregnancy itself, some include the postnatal period. Some data collection occurs at the first antenatal booking clinic thus data relating to abuse in pregnancy is restricted to the first few weeks only.

There is also the difficulty of making sense of the data due to the interrelation of risk factors. There is evidence that influences of domestic abuse include an increase in smoking rates, alcohol abuse and substance abuse^[21]. These factors' being more common in abused women is commented on in several studies relating to pregnancy and abuse^[22-28]. There is also evidence of late booking for antenatal care being more common^[19, 24]. In order to assess the direct impact of domestic abuse on pregnancy many studies adjust for these confounders that are known to be independent risk factors for poor obstetric outcomes. However if as some authors argue they are in themselves results of living with abuse^[21], then as Webster notes, we may be adjusting out the full influence of living in an abusive relationship^[25].

Violence to the Abdomen from blows or falls

Trauma to the pregnant abdomen can cause a range of outcomes, at worst causing placental abruption and the risk of death of both mother and infant. Less severe trauma can cause miscarriage, stillbirth, premature rupture of membranes, premature labour, premature delivery, or admissions with abdominal pain and vaginal bleeding. Many studies document these problems being more common in abused women but individual cases are not linked with a specific episode of abdominal trauma. There is one case reported by Stephens in 1997 of a baby born with bilateral subdural haematomas discovered to be due to severe antenatal domestic violence^[29].

The CEMACH report on maternal deaths relating to pregnancy and the first postnatal year in England and Wales shows the worst case scenario with 12 women murdered in the period 2000-2002 'all but one died during pregnancy or within 6 weeks of delivery'^[30]. Details are not included of how many babies survived this fatal episode.

Sadly those who did not survive no longer require health services and those who did, no doubt suffering the emotional consequences of losing their mother, will be absent from our study population. However it can be postulated that this is an extreme end of a spectrum of violence and that where the outcome is not maternal death the pregnancy and developing foetus must be at risk.

Cokkinedes in a postal questionnaire survey of 6718 women in the USA included in their self-report categories of health problems in pregnancy a category of 'trauma due to falls or blows to the abdomen'. After adjustments for confounders reports of physical violence were not surprisingly significantly associated with this reason for admission (OR 20.2, CI 1.9-206).

Just 46% of the women reporting violence however were describing domestic violence only; the rest had also been involved in fighting. 70% of those describing domestic abuse also described being in fights. This study did not collect enough cases of abdominal trauma to investigate that further. A population based sample will not provide this whereas as the authors point out an Accident and Emergency Unit sample might ^[31].

Webster in an Australian study divided the abused women (242 abused in the past, 59 abused in pregnancy out of 1014 questioned) by levels of abuse. All levels include a physical component but graduate from pushing and shoving to kicking and punching to choking and strangling and use of a weapon. Although women abused in pregnancy had a statistically significantly lower birth weight this difference disappeared with adjustment for maternal age, smoking, alcohol use, education, ethnicity, marital status, parity, the number of terminations and ante-natal visits and gestational age^[25]. This might suggest that violence per se unless directly targeted at the abdomen or causing a fall impacting on the abdomen has its effect by influencing health behaviours or use of antenatal services.

Emotional consequences of fear and stress

It is possible that the psychological effects of domestic abuse might impact on the pregnancy and thus the developing foetus. Sharps review of the United States literature on peri-natal domestic abuse from 2001-2006 noted a few small studies beginning to research biological mediators for less favourable outcomes to pregnancies in domestic violence. He describes one small study showing significant differences in cardiac response rates in pregnant abused women. Also in a separate pilot study an alteration in the ratio of ACTH, Cortisol and beta-endorphin, although no difference in absolute levels ^[22]. There is not yet an understanding of how domestic violence causes these physiological changes and no mention of how these particular changes affect a pregnancy and its outcomes.

The increased use of alcohol, illicit drugs and smoking is discussed below. It has been suggested that this 'self-medication' is a coping mechanism^[26]. Thus again the impact of domestic abuse is mediated by fear and stress causing adverse health behaviours detrimental to both mother and child.

Developmental consequences of fear and stress

The infant human brain at birth is relatively immature in comparison to other mammals; consequently the first two years of life, and especially the first, see marked growth and development of the brain, including the establishment, or loss, of cellular interconnections, and cell culling. The direction and pattern of these processes is partly genetically, partly environmentally, driven although of course these factors are not independent; the emerging science of epigenetics is providing some explanation for how they inter-relate^[32]. However they do so, it does alter the undeniable conclusion that our children's brains are sculpted irrevocably by their early life experiences

There has emerged a large body of literature describing and explaining the impact of environmental violence on the developing brain^[33]. What these reveal is that children exposed to early violence display altered responses to confrontation and conflict; in essence they are “hard wired” to be anxious, distractible, highly aroused and impulsively aggressive in situations of conflict. This is largely irreversible^[34]. These children present with hyperactivity, distractibility and impulsive aggression, and are clinically difficult to distinguish from children with Attention Deficit Hyperactivity Disorder (ADHD).

Health behaviours associated with abuse that put the foetus at risk

Stark and Flitcraft studied 481 women attending the accident department with injuries and designated them as abused and non-abused. Abuse was categorised as positive, probable and possible although the authors argue that they had similarities that suggested all were indeed suffering domestic abuse. A comparison of ‘psychosocial’ histories of abused versus non-abused fails to state whether one or all three of these groups were used for the cases. It is difficult to be sure how accurate is the ‘date of first at risk incident’, which is used as a proxy for the beginning of abuse, as it is taken from medical records. However prior to the abuse the authors report the cases and controls have the same incidence of drug abuse but a significant increased incidence of alcohol abuse is present in those women who later become abused. Post abuse there was a significant difference in rate of drug abuse and a significant rise in the rate of alcohol abuse. They argue that women living with abuse have a number of psychosocial difficulties, with which the domestic abuse is in part associated, and that this temporal association strengthens theories of causality^[35]. In fact these have been described as ‘coping mechanisms’^[26]. In an investigation of smoking in pregnancy Pickett discusses stopping smoking advice in pregnancy. She feels that the smokers in her large cohort had multiple disadvantages leading to difficulties in initiating and maintaining the behaviour change needed to stop smoking, domestic abuse may be just one of those^[36].

Alcohol Use

According to some studies living with abuse increases the likelihood of alcohol consumption and alcohol abuse in pregnancy. Amaro found a significant increased risk of abused women having a ‘heavy’ use of alcohol (OR 2.43 CI 1.71-3.46) [26]. Webster reports on ‘alcohol use’ but gives no classification information. Whilst not finding that the increase in alcohol use was significant between the abused and non-abused group there was a significant increase between the 89 women in their most severely abused group compared to the less severely abused level 1 and 2 groups and the non abused group^[25]. MacFarlane looked at any alcohol use in pregnancy in abused women. Abuse during pregnancy increased the risk of alcohol use (RR 2.2 CI 1.6-2.9)^[24]. Bacchus however found no significant association when comparing less than or more than 14 units per week^[27].

Alcohol is well documented as a teratogen. Foetal Alcohol Syndrome is associated with heavy drinking, ‘a characteristic pattern of facial abnormalities, growth retardation and neuro-developmental abnormalities that result in sensory-motor impairments, intellectual difficulties or behavioural problems’^[37]. Aside from the classical syndrome, effects are

described as showing a dose response relationship to alcohol consumption. They include, neuro-developmental problems such as hyperactivity, attention difficulties, executive function and social-emotional difficulties and psychopathology^[37]. Current evidence on the dangers of alcohol is not absolute but the overall message that women suffering abuse may well be more likely to drink alcohol in pregnancy must be viewed in the light of current guidance from the National Centre for Clinical Evidence (NICE). They advise that alcohol should be avoided in the first 3 months of pregnancy and if expectant mother chose to drink they should have less than 1-2 units per week. NICE also warn that more than 5 units drunk on one occasion may be harmful to the unborn baby^[38].

Smoking

Smoking is reported to be more common in women attending antenatal clinic who have been or were currently being abused although no adjustments for socio-economic status were made^[25]. McFarlane reports a relative risk of 1.7 (1.3-2.2) that a woman abused in pregnancy was also a smoker^[24]. Bacchus in a UK study found that a history of abuse was associated with an increased risk of being a smoker either the year before pregnancy or during the pregnancy^[27]. Berensen reports that abused women reported 'more frequent use of tobacco' and that this was statistically significant^[28].

Cokkinedes brings alcohol and smoking together in her analysis finding that women reporting physical violence were more likely in the third trimester to smoke or drink OR 2.0 (1.5-2.8) or to smoke **and** drink OR 3.7 (1.6-8.4)^[31].

From another perspective, in the millennium cohort of pregnant women heavy smokers were 3 times more likely to report partner perpetrated violence than non-smokers^[36].

Smoking has been shown to cause low birth weight and prematurity both of which predispose to neonatal health problems, cerebral palsy and learning difficulties^[39]. Zammit, in an observational study using the ALSPAC cohort, found an association between maternal smoking and adolescent psychosis. Proving a causal link in such a study is not possible despite their efforts to allow for confounders. They admit other studies have not found this association. They also admit that the mechanisms by which this exposure could influence the developing brain and what alterations to neurobiology predispose to psychosis are unknown^[40]. This applies far more widely in the area of foetal and neonatal brain development. Tobacco has a teratogenic effect and can also affect the foetus by decreasing umbilical blood flow and nutrition to the foetus^[37]. Smoking in pregnancy has been looked at in a longitudinal study of low risk 'predominantly middle class' children up to the age of 16 in Canada. The findings at 13-16 mirrored the research group's earlier findings on this cohort of 145 adolescents. They found a dose response effect detrimental to overall IQ with specifically the auditory – verbal domain of cognitive functioning affected^[41].

Illicit drug use

Since Stark and Flitcrafts' data that suggested that there was a 6 times greater drug abuse problem in women after domestic abuse other studies have explored this as a health risk^[35]. Bacchus found no association with any illicit drug use and domestic abuse. In this study women were promised confidentiality unless they gave information that suggested any

children were at risk^[27]. This might have discouraged disclosure of drug use in pregnant women who, even if they were primiparous, had placed their unborn child technically at risk. Ethically there is no getting round this issue. Berensen recorded simply use or not of illicit drugs during pregnancy and 'victims of abuse' were statistically more likely to report this^[28]. Amaro asked questions about illicit substances prior to and during pregnancy and also obtained urine for drug screening. Cocaine and marijuana metabolites were screened for. Users were separated into heavy and light users with a combination of report and screening results. Abuse victims in pregnancy were more at risk of being drug users (OR 2.48 (1.72-4.17)) and were heavier users than non-abused women. This association between violence and drug use remained even when adjusted for race, age, marital status and education^[26].

The effect of illicit drug use in pregnancy is a less well research area than tobacco or alcohol. The effects will vary from drug to drug. In the short term neonatologists are prepared for treating neonatal abstinence syndrome, which is the effect of withdrawal on the newborn infant. In the longer term there is evidence of impact on the developing brain. Research in this area tries to adjust for all potential confounders. Glantz however expresses concern that for example Low Birth Weight

(LBW) is adjusted for. Opiates, Cocaine and Marihuana have been associated with LBW. Current analyses do not allow for LBW to be an 'intermediate step' by which these drugs exert their effects. Again this indicates that although outcomes are being investigated we are far from understanding mechanisms of impact.

Glantz review concludes that marihuana does not decrease IQ but impacts on executive function, visual analysis, attentional behaviour and hypothesis testing. There is a negative influence on academic achievement. Delinquency and externalising behaviour are increased.

For Cocaine at present there is inconclusive evidence about development. There is discussion about whether the infant with increased reactivity, poorer arousal modulation, and attention regulation may proceed to have socio-emotional difficulties due to the impact on interactions. There is some evidence that the over reactive infant at one month has emotional difficulties at four and behavioural problems at seven.

Evidence about Opiates is inconclusive^[42].

Poor utilisation of health services in the ante-natal period

Abused women may present later for ante-natal care. Macfarlane in the USA followed a cohort of 1,203 women 16% of whom disclosed physical or sexual abuse in pregnancy. Late presentation for care was significantly more in the abused women $p=0.01$. The reasons for late booking are not enumerated although there were reports that 'many women' explained that their antenatal healthcare was influenced by partners preventing them for example getting medication and keeping appointments^[24]. Lutz found other reasons in a qualitative study of 20 mothers which included worrying about being found by a partner, worrying drug use would be detected and the attitude of an 'insensitive' doctor^[43].

The Confidential Enquiry into Maternal and Child Health (CEMACH) review all maternal deaths during pregnancy and in the period following birth. They were concerned in their 2004 report that late booking and missing antenatal appointments was a common finding in women who had disclosed domestic violence. This was present in 71% of the 55 women who had disclosed domestic abuse compared to 20% of all deaths although this figure is a concern in itself. All the women murdered by their partner during or in the postpartum period were late bookers or poor attenders^[30]. CEMACH reports many of the women reporting domestic violence, who later died, were accompanied at appointments by domineering or disruptive partners. Many women were never seen without their partners and thus it may be that these women were discouraged from attending when their partners could not accompany them.

There is evidence that women who are homeless are also late bookers for antenatal care. Paterson performed a retrospective case control study in inner London of homeless women and found that they booked later^[44]. This group probably overlaps with the abused group as domestic abuse is a common cause of women becoming homeless. However there still may be something about the homelessness that gets in the way whether it is psychological or practical. This is discussed in more detail in a later section.

In response to its report in 2004 CEMACH commissioned a systematic review of access to antenatal care^[45]. The review attempted to understand the reasons for poor access to antenatal care and also clarify the risks to mother and baby of poor attendance. In fact the evidence was sparse in total and sparser still for the UK. There were no randomised trials to consider and many methodological difficulties in the studies that had been published. They could only conclude that for women who do not book for antenatal care there may be increased peri-natal morbidity (Low birth weight, admission to neonatal units) with 'possibly more mortality'. For late bookers there may be poorer neonatal outcomes and possibly an increase in caesarean section rate although this was from an American study.

To summarise their findings about the issues for access to antenatal care they describe factors affecting the attendance for first appointment (booking) and then have put together a table of the influences which have a bearing on whether a mother continues to follow the planned programme of antenatal checks.

'Initial use of antenatal care is influenced by:

- Pregnancy rejection or acceptance (psychosocial and socio-demographic modifier.)
- Personal capacity or incapacity (perceived susceptibility, perceived severity, perceived need)

Continued access is influenced more strongly by a balance between:

	Factors	Mediated by:
GAINS (perceived benefits)	Clinical self, baby Psychosocial chance to change, creating a socially valued pregnancy, consequent (gain in) confidence, pride, knowledge	Provision of: <ul style="list-style-type: none"> • cultural, emotional, physical safety • caring in the care • credible staff with excellent communication and interpersonal skills
VERSUS		
LOSSES	Psychosocial loss stigma, powerlessness, broken confidence Resource loss (money, time)	lack of: <ul style="list-style-type: none"> • cultural, emotional, physical safety • caring in the care • credible staff with excellent communication and interpersonal skills • respect for women's self and lifestyle knowledge • difficult/expensive access to care • perception that antenatal care provides no benefit • failure to value women's time.'

Table 1. Access to antenatal care: A systematic review CEMACH

The information available from the literature about women living with domestic abuse and their health service use in general draws some parallels with this. This is discussed elsewhere. However it is worth noting that safety is an issue described here which has particular resonance to women whose safety is a constant concern at home and who take risks in disclosing domestic abuse if screened in antenatal clinic. In addition in order to have 'credible' staff with 'respect for women's self and lifestyle knowledge' an understanding of domestic abuse would be imperative.

2.4 Parenting

It seems logical to assume that a mother living in an abusive relationship might have her ability to parent compromised and that poorer parenting would impact adversely on children. Parenting is a complex process of promoting and supporting the physical, emotional, social and intellectual development of a child from infancy to adulthood. Does domestic abuse influence parenting and in what way? What is it about domestic abuse that does this? Does this influence have detrimental effect on children and does this suggest a need for health services?

The Royal College of Physicians briefing paper on parenting states that 'Sub optimal parenting is a risk factor for mental health problems in childhood, adolescence and adulthood.'

'The architecture of the areas of the brain controlling emotional and social development is affected by parent –child relationships in very early life. The development of these areas is most active in the first three years of life. Neural pathways established early in life can be changed at a later date, but change is more difficult to achieve with increasing age. One of the key pathways influenced by relationships in childhood is the neuro-endocrine response to stressful stimuli.'^[46]

Parenting can be described in 2 dimensions, that of demandingness and responsiveness. The 'authoritative parent' scores high in both areas, the 'authoritarian' high in demandingness and low on responsiveness. 'Permissive' parents are low on demandingness and high on responsiveness whereas neglectful parents are low in both dimensions. Therefore studies of parenting which use observation are often attempting to quantify these elements in the parent child relationship documenting 'control' and 'warmth'.

Belsky is seen as the basis for investigations of parenting in this field^[47, 48]. He proposed an ecological model for parenting describing parenting as a 'buffered system'. It is influenced by exo-systemic (the larger social system around a family), micro-systemic (the immediate household) and ontogenic (parental personality and development) factors. Belsky asserts that if we are predicting parenting behaviour which has the potential to buffer a child from stress it is the parents psychological resources that are more important than the sources of support and which are in turn more important than the characteristics of the child.

The researchers who address the influence of domestic abuse on parenting and thus on children discuss the complexity of the subject and the use of the ecological models to help them understand this ^[47-49]. Ecological models are used in both psychology and public health research. They recognise the 'dynamic complexity' of 'relationships between individuals and their environments'. Studies performed are guided by a set of ideas rather than a simple hypothesis and test these out in a specific situation.

From the literature it is possible to extract a number of possible means by which the parenting experienced by children of mothers suffering domestic abuse might be influenced either directly or through a mediator. In order to express the complexity of the subject and identify the factors, many studies explore a wide number of these and attempt to understand their inter-relations. There is a wide range of focus and approach. For this review the following evidence is here considered from three perspectives:

1. The childhood history of mothers who have suffered domestic abuse
2. The association of domestic abuse with other maternal difficulties which influence parenting capacity
3. The direct impact of domestic abuse on parenting

Following this the intrinsic characteristics of the child are considered in terms of the emotional and behavioural outcomes for the child.

1. The childhood history of mothers who have suffered domestic abuse

Parenting is influenced by our own experience as children. The extreme example of this is explored in literature delineating risk factors for child abuse and neglect. The ALSPAC study, a large cohort study from the Southwest of England showed that in their uni-variate analysis a parental history of child abuse is associated with an increased risk of maltreatment. However in a multi-variate analysis this association seemed to disappear, with the exception of a maternal history of sexual abuse. However factors which remained significant were 'parental age, educational achievement and a history of psychiatric illness' ^[50]. A later paper showed an association between a parental history of child maltreatment with maltreatment of their own children; the authors postulate that much of this effect is mediated by socio-economic disadvantage. Clearly an ecological model fits better here as numerous disadvantages work through interconnected mediators to exert their effects^[51]. Mothers reporting childhood physical abuse or witnessing IPV were at a 4-6 fold risk of IPV in a large (n=3527) survey in the USA. This shows an association only but suggests that some mothers in refuge may have a poorer experience of parenting to draw upon.

2. The association of DA with other maternal difficulties which influence parenting capacity

The literature on domestic abuse identifies several associated factors known to influence parenting capacity

- mothers mental health
- socio-economic status
- parental drug abuse
- parental alcohol abuse

Mother's mental health

Child health evidenced based guidance promotes surveillance by midwives and health visitors for maternal depression because of the impact of this illness on behaviour, cognition and emotional development ^[52]. Hall states that 'boys are more at risk than girls' and postulates only that the depression 'probably affects her interaction with the baby'. Domestic abuse is a risk factor for development of mental health problems in women. There is a high prevalence of mental health problems in women who have suffered domestic violence and a dose response has been postulated in meta-analyses of studies in the area ^[53]

Levandoskys observational study of 95 mothers suffering domestic abuse and their children aged 7-12 found a relationship between maternal depression and maternal warmth. Mothers were asked to discuss 2 topics with their child that they disagreed about and were filmed. The Beck Depression Inventory was used among the standard questionnaires to capture mothers' mental health status. The videos were rated by trained staff and there was good inter-rater reliability ^[47]. The same author adding to this sample with another 25 mothers and using the Parenting Style Survey as a self report measure conducted a structural equation model analysis to bring an ecological perspective to the data. Domestic abuse influenced mothers' mental health, which had a detrimental influence on their parenting ^[49]. Huang used data from the Fragile Families and Child Wellbeing study, and reports on a sample of 900 who had revealed domestic abuse at year 1 after the birth of a child out of wedlock. This disadvantaged group is the focus of a large multi-centre study. Children are followed up for 5 years. This study used an observational method for assessing parenting which is part of a recognised tool HOME (Home observation for management of environment). Unfortunately there is no information either in this paper, or another to which readers are signposted for more details, that would allow an assessment of inter-rater reliability ^[54]. Mother's mental health is measured with the Composite International Diagnostic Interview. Structural equation modeling is used. They show that domestic abuse influences mothers' mental health. They also show that poorer maternal mental health is associated with increasing externalising behaviour difficulties in the child by year 5 ^[48].

Psychological functioning of mother was very dependent on social support and affected by negative life events. This could be that depression is more common in isolated women, that depression causes women to draw away from their support network or that this is part of the isolation foisted on women by controlling partners.

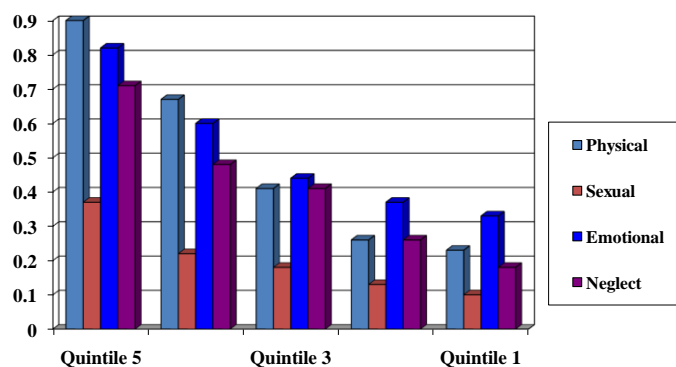
Traumatic events are part of the picture in domestic abuse and add to the risks to mothers psychological functioning, fitting in with Trauma theories ^[49].

Socio-economic status

There is a higher prevalence of violence in low income families, including sexual violence and domestic abuse. The same pattern is seen for child maltreatment, which show marked socioeconomic inequalities in prevalence^[42, 55] mirrored in steep gradients in abuse registration (Figure 1). Gradients are even steeper for child abuse deaths – the rate for children in the UK between 1980 and 1995 in Social class V was 17 times that of children in Social class I ^[56].

Levandoskys study^[49] notes that even within families where there was domestic abuse higher income was a predictor of increased authority-control which is a predictor of decreased anti-social behaviour.

Figure 2: Social gradient in Child abuse and neglect in West Sussex (NJ Spencer, A Wallace, R Sundrum and S Logan. Unpublished data from the West Sussex Regional child health computer.) (figure courtesy of N. Spencer)



Parental drug/alcohol abuse

None of these factors are considered in the studies looking at parenting and domestic abuse. However they all have a strong relationship with domestic abuse ^[57]. There is evidence that for substance abuse the domestic abuse predates them and can be a predisposing or maintaining factor for the addiction ^[35]. They are all recognised risk factors for children whether they act purely by their influence on parenting or in part in other ways is not clear.

3. The direct impact of domestic abuse on parenting

Parenting in families where there is domestic abuse has been studied in the context of its influence on the emotional well being of the children. The mental health consequence for children of living with domestic abuse has been studied extensively with the vast bulk of studies coming out of North America. Differentiating the specific effects of domestic abuse within the household, in a background of the many other influences on emotional well being, is difficult. As the wider effects of violence and threats of violence on a mother may include substance or alcohol abuse, depression and anxiety or physical injury or illness there is a problem also in measuring this effect in its totality. This is one area where factoring out elements of family life in analyses which are known to impact on emotional well being may well subtract some effects of domestic abuse. It does however distil down to the direct effects of living with domestic abuse and has allowed researchers to look at the relationships with the severity of domestic abuse.

The complex interrelation of factors in abusive relationships is described in some detail in studies looking at how domestic abuse exerts its effect. Is it just violent outbursts and the threat of these influencing children's well being? Are these effects direct or are they mediated by maternal factors such as mental health or parenting style?

Levandosky 'study of 95 mother child interactions showed that mothers parenting style is influenced by domestic abuse. Both violence and psychological abuse affect parenting warmth. Warmth was also affected by maternal depression but separately to domestic abuse, thus depression was not a mediator. However maternal warmth did not predict child behaviour.

Psychological abuse of the mother predicted the levels of authority – control in parenting, but only if the child's observed behaviours were not controlled for. Physical abuse towards the mother did not. The levels of authority-control were predictors of children's pro-social and anti-social behaviours. The author admits that a single point in time measurement such as this makes it impossible to tease out the influence of child behaviour on parenting which would need a longitudinal study. Does the child, either by modeling the perpetrators reactions to its mother or manifesting the developmental consequences of exposure to early violence, influence the mother's responses^[47]?

The same population adding in 30 more that had refused the video observation element were used for an analysis using the Child Behaviour Checklist, the Child Depression Inventory and the perceived Competence Scales for children completed by the mothers. Structural equation modeling was used. Mothers lower psychological functioning predicted poorer parenting, which fits with the evidence there is about depression and mothering. However the psychological functioning of the mother influences her children directly as well as mediated through poorer parenting. Levandosky postulates that this may be due to variability in parenting rather than consistency or that attachment problems originating early in a child's life override good parenting later on^[58].

Domestic abuse influenced parenting mediated by influencing mother's psychological functioning and their 'marital satisfaction'. However marital satisfaction had only a marginally significant influence on parenting.

Child abuse by either partner was the most significant predictor of the emotional-well being of children. Parenting was significant in influencing children's emotional health both directly and through the influence of child abuse.

In the fragile Families and Child Well being Study Huang measured child behaviour and maternal mental health. Parenting was scored by observation during a home visit and by a score for "spanking" although this is not defined precisely. Domestic abuse was measured using a scale devised for this study and did not differentiate between physical and emotional abuse in the analysis. Structural equation modeling was used. Domestic abuse at year 1 was associated with maternal depression and spanking at year 3 and internalising and externalising behaviour difficulties at year 5. Depression was not associated with parenting behaviours or spanking.

The results indicate that domestic abuse has a direct effect on internalising and externalising behaviour problems. It also has a negative influence on behaviour mediated by its effect on parenting and increases the use of spanking. Domestic abuse was correlated with maternal depression, which did influence externalising behaviours, but did not act via the influence of maternal mental health on parenting^[48].

Graham – Bermann in an earlier study compared 21 cases with 25 controls of mother child dyads with a mean age of 3.8. She found increased internalising and externalising behaviours in cases using observation of free play. The most significant predictors of child behaviour were the emotional abuse the mother had suffered and her mental health^[59].

Jarvis in 2006 used a sample of 62 mother and child dyads that had resided in refuge and had been back in the community for at least 6 months. Standard checklists were used with mothers to measure depression, child functioning and trauma symptoms. Severity of violence and satisfaction with their child's behaviour used internally devised scales. Predictors of internalising behaviour problems included maternal depression, the type of refuge programme and child abuse. Externalising behaviour problems were predicted by maternal depression and refuge programme. This study does not measure severity of domestic abuse using the Conflict tactics Scale nor differentiate between physical and psychological abuse in its scoring. The severity of domestic abuse by this method of rating did not predict child behaviours. The author postulates this may be due to their scoring system or wonders whether after a certain severity and frequency (and there is evidence that the refuge population are those at the more severe end^[10]) then there is no additive effect. This study does suggest however that the nature of the programmes provided within refuge may affect children's behaviour. Many of these mothers remained traumatised and depressed months after leaving refuge and need programmes which may protect their long term psychological health and that of their children^[60].

Male abusers and their parenting

Little is known about male perpetrators of domestic abuse and their parenting^[61]. English discusses Polanskys concept of 'family radicals', that is the mother child/ren unit which is relatively stable. The males that enter the unit whether 'beneficial or dangerous' may have too short-lived an effect on children's health and well-being in comparison to the mother^[57]. Any effect however may be mediated by the mother.

Intrinsic factors

Gender

In general despite the more traditional view in the literature of the 1990s and earlier that domestic abuse results in passive girls and aggressive boys the majority of studies including the 2 major meta-analyses^[62, 63] do not find differences in the strength of effect between genders.

Hazen in a large (2,020) study, part of the National Survey of Child and Adolescent Well-being in the USA, did find that male gender was a predictor of the effect between domestic abuse and externalising behaviour problems only. This study postdates the major meta-analyses and multiple regression analysis is used to interrogate the data. It does sample however from a group all being investigated for safeguarding concerns^[64].

Looking at emotional and behavioural effects with a different lens however Baldry in a large cross-sectional survey of Italian school children did reveal some differences when looking at bullying. The anonymous survey filled in by 8-15 year olds under exam conditions used only report from these students and admits this could result in under reporting of domestic abuse and child abuse. They argue that it reflects however the perspective of these young people. They found a 17.4% prevalence of 'inter-parental physical or psychological violence'. The disclosed rate of being a bully or a victim was disturbingly high at 48% and 57% but these were increased in children who disclosed domestic abuse to 60% and 71%. The increased effect of domestic abuse on the rate of being a bully or a victim was higher however for girls; it increased their chance for example of being a bully 3.5 times compared with 1.8 for boys. However when regression analysis was performed on this sample the overarching association, when age, gender and child abuse was allowed for, in being a bully or victim was domestic abuse. This type of study however cannot prove causation. It provides however information which might explain in part why children living with domestic abuse do badly in educational terms^[65].

Gender is discussed as part of reviews where mechanisms of the influence of domestic abuse are postulated. Social learning theory, which suggests modeling of behaviour by children, may seem to fit with the traditional understanding of passive girls and aggressive boys. Rivett dismisses this as not explaining the internalising behaviours that are seen although there is evidence that mothers living with domestic abuse may provide a model of depression and anxiety. However the literature does not clearly support modelling on the parents of the same gender. In general data from British children, measuring diagnosable

mental disorders, does suggest that girls tend to be over represented in those with emotional disorders (internalising) and boys in those with conduct (externalising) disorders^[66].

In summary the gender of the child may be part of the picture in terms of the effects of domestic abuse. That the majority of domestic abuse is from males towards females does suggest that the whole phenomenon has a gender influence and much of the fundamental understanding of domestic abuse has its roots in feminist research. However there is no evidence that one gender is significantly more adversely affected by living with domestic abuse but it is quite probable that gender might be a factor in influencing the specific mental health outcome for a young person.

Age

There is some disagreement and lack of knowledge about whether the age of the child makes a difference to the emotional consequences of domestic abuse. Logically the age of the child at exposure, depending on the cognitive and emotional development of the child should have different results in terms of a child's understanding of the event and their behavioural response.

The evidence accumulating about environmental violence and the developing brain discussed earlier might suggest a particularly vulnerable period for exposure to violence with long-term consequences.

The bulk of domestic abuse literature studies children when they are of an age when they can be spoken to allowing corroboration of experiences of domestic abuse and child abuse and their behaviour. They also attend school where teachers rating of behaviour can be obtained. Despite this many studies use maternal report only because of the added ethical and resource implications of extending further. In Wolfe's meta-analysis the youngest children studied are 4^[62]. Kitzmann does refer to pre-school children as a group in her meta-analysis, which is described as under 5s^[63]. Neither Wolfe nor Kitzmann report age as a moderating factor in the strength of overall effect of domestic abuse on negative emotional and behavioural outcomes although Kitzmann suggests that there may be a slight increased risk for pre-school girls when measured on scales of social competence^[63]. Hazen however did find an association between older age and internalising and externalising behaviour problems after multiple regression analysis. The cumulative influence of living with domestic abuse however is poorly considered in the literature with duration of exposure to family life of this nature rarely measured. It may be that findings of older age being associated with more problems merely indicate longer exposure. The population in Hazen's study were all being investigated for safeguarding concerns and this may also indicate a population whose exposure to domestic abuse has been a longstanding feature^[64].

Cognitive ability.

Children and adults with learning difficulties have an increased chance of developing mental health problems. Cognitive disability due to physical abuse or injury in an episode of domestic violence is a rare but plausible factor in increasing the risk of emotional and behavioural issues in this group. Koenens twin study points towards a small but significant

loss of IQ in children living with domestic abuse. This may be a small additive risk factor for emotional and behavioural difficulties^[67].

Resilience

Within the safeguarding literature the concept of resilience in children is described. These are factors within or surrounding the child that protect them from the emotional damage of abusive and neglectful parenting and are felt to explain why some children do so much better than others faced with the same adversity. These include positive relationships with other carers, high IQ, ability to excel in some area, etc. These factors are likely to play a role in protecting children living with domestic abuse although this has not been studied specifically and is poorly understood^[68].

Intrusion

Does the behaviour of children, consequent on living with domestic abuse 'intrude' on the family in such a way as mothers parenting is influenced in a response to this. This is the suggestion from Wuests qualitative study^[69]. Children in these families are more likely to show emotional and behavioural difficulties, do parenting differences reflect the increased challenges women have with these children?

Summary

The mechanisms by which living with domestic abuse may affect the emotional health of a child are complex. The child's emotional health results from interplay of factors intrinsic to the child and the family and community environment in which he finds himself. These may all include factors that are detrimental to good emotional health and those which are protective. Yet again for the individual child the affect of domestic abuse will just be part of this, but there is evidence that this can be significant, specific and enduring in the emotional impact it makes on a child.

Calder et al in their detailed consideration of the complexities of assessing and intervening on behalf of children in violent families lay out what is known about the effect of parenting in detail. Fleeing from a perpetrator to refuge is merely the beginning of helping women to recover from abuse. Recovery from the trauma and its impact on self-identity requires high quality practical and emotional support. Only then can mothers fulfill their parenting potential. Thus whilst this thesis concentrates on health service provision for children, without these going hand in hand with those for women their effectiveness would be limited.

2.5 The Dangerous Home

Home and family should provide a place where children and young people feel emotionally and physically safe. There is good evidence to show that children are present during violent episodes, and if not actually present, hear what is happening and witness the consequences in distress or injury to their mother^[70, 71]. Where emotional and physical abuse is being witnessed it can be confidently surmised that children will not feel safe themselves. It has been shown that one of the factors children use to appraise a violent incident is the level of physical risk to themselves^[72]. The impact on the child's mental health of witnessing domestic abuse has had the most attention paid to it. There is a large body of literature seeking to describe the precise effect on children's mental health of domestic abuse and thus the interventions that might be effective. Within 'Working Together to Safeguard Children' living with domestic abuse has been classified as 'emotional abuse'^[73].

Episodes of Violence

Perhaps the most clear-cut and distressing event that will have emotional effects is when a child loses its mother to murder which is a thankfully less common but unfortunately worst case scenario. A partner or former partner kills two women a week in the UK but the numbers of these who leave children is not available^[8]. This also may leave the child without a father or father figure as the perpetrator is sent to prison.

Are children present when violence occurs?

It is clear that children know when violence is occurring within their home whether or not their parents realise this. Fantuzzo's study of police reports in the USA of incidents they were called to showed that of the 50% of calls where there were children in the household 81% of these children were 'directly exposed'. This seemed to be more common in the under 6s in their series, not surprising as these children are those who should be under closer parental supervision^[71]. Chemtob who interviewed 25 mothers and 25 children found that 84% of the children had witnessed physical abuse of their mother^[74]. In the UK study by Abrahams mothers reported that 75 % of their children were present during violence, including 10% witnessing sexual assault^[70].

Do children get involved in the violence?

Anonymous telephone interviews of 111 women in the USA reported a 38% of children being accidentally involved in the violence and 28% being injured intentionally whilst trying to stop the violence^[75]. In Chemtob's series 56% of children reported they had intervened and 56% of the mothers reported this also^[74]. A series in an accident and emergency department in the USA looking at 10 years of injuries presenting as occurring during episodes of domestic violence reports of the 139 cases 24% were injured trying to intervene and 78% of these were adolescents^[76].

Are children physically injured during these incidents?

There is evidence that children present during violent episodes in the home can be injured but little research in this area. Concerns that violence to the pregnant abdomen or falls during violent episodes can disrupt intra-uterine structures and impact on the foetus is

described elsewhere. Stephens reports a case where severe violence including abdominal trauma resulted in baby born with sub-dural haematomas ^[29].

Nelson reports 3 cases, 2 accidental shootings and one fatal stabbing where its mother held up the child as a shield ^[77].

Fleggan looked retrospectively at all non -accidental head injuries that had presented to an Emergency Unit in Cape Town, 68 in total. These cases seem to have had multi-agency decisions and information gathering and thus good inclusion criteria. 47% (n=33) were the unintended victims I.E were involved in an assault on another adult usually the mother ^[78].

Christians cross-sectional study noted a range of modes of injury to the 139 children, 'hit, thrown, hit by object, dropped' as well as burns, stabs and gunshots. 9% needed hospital admission, 2% surgical or intensive care ^[76].

Domestic Abuse as a risk factor for Child Abuse.

In 1975, not long after the first British refuge opened in Chiswick Gayford interviewed 100 women, most of who were residents. Fifty-four percent reported their partners abused their children, and 37% that they themselves had physically abused their children. We are not told what the level of overlap was ^[79]. Since then it has been increasingly recognised that Domestic Abuse in a family poses risks to children.

In addition, children may be used to control victims. Table 2 shows some of the child related behaviours reported to the Cardiff Women's Safety Unit's evaluation from in-depth interviews with 222 victims ^[9].

Table 2: Reported behaviours of perpetrators Cardiff Women's Safety Unit (N=222)

Abusive behaviour	Current partner	Any partner
Threatened to hurt the children	5.0%	10.4%
Shouted at the children	16.2%	30.6%
Abused or threatened to hurt the pets	5.9%	16.2%
Punished or deprived the children	4.5%	11.3%
Threatened to take the children away	21.6%	26.6%
Hit or otherwise hurt the children	5.9%	14.0%

Holden has explored how Domestic Abuse in many ways, not only living with terror, is a form of emotional abuse and produced a thought provoking taxonomy ^[18].

Quantifying the risk of all forms of Child Abuse where there is Domestic Abuse is complicated by similar definitional and thus case ascertainment difficulties for the presence of Domestic abuse as there is for Child Abuse itself. Studies use from very basic questions to validated questionnaires to measure by self-report and retrospectively the presence of Domestic Abuse. Sometimes they attempt to grade its severity. Then it is used as a proxy for child

A review in 1999 of 25 studies describes an overlap of 30-60% in the majority of studies^[80]. There have been two more recent large North American studies, one of army families and one of at risk mothers in a voluntary child abuse prevention programme. The first, a cohort study measuring over 2,000,000 person years showed odds ratios of 4.9 for child abuse where spouse abuse had been identified^[81]. The latter, of 2,544 mothers, followed firstborn children under 5 for 6 months and produced odds ratios for physical abuse, psychological abuse and neglect of 3.38, 2.2, and 2.18 respectively^[82].

Not all the studies measure whether the male or female partner perpetrates the abuse or both. As Gayford noted either may abuse the children. It would seem that the perpetrator of the Domestic Abuse would pose the most risk but this has not been delineated. A study in Hawaii of 595 high risk families enrolled in a home visitation programme measured mother reports of their own abuse of their children and report that 'severe physical assault' by the mother is increased if the mother was in a violent relationship and also took part in the violence (OR 6.44) but not if the mother was just a victim^[83]. US studies have shown that male aggression towards partners is correlated with increased aggression by both partners towards their children^[84]

Two North American studies of children presenting for assessment of child sexual abuse measured a history of Domestic Abuse in 54% AND 53% of cases^[85, 86]. These percentages can be considered alongside the population rates for any type of child maltreatment in developed countries cited in the Lancet series by Gilbert as 9 %^[42].

Assessing the risk is hampered by the variation of sample groups, many far from a representative sample of the population and the definitional difficulties. Few studies measure the situation in Britain. The other issue is that again many perform logistic regression to allow for other factors that are also risks for child abuse. However these may be in part the result of Domestic Abuse E.g. mother's mental health problems and social isolation, both recognised problems where there is Domestic Abuse. Thus factoring these out might be actually factoring out the means by which in part Domestic Abuse poses a risk to children.

The British ALSPAC study which is 'a large cohort study of a local population' fails to produce a link between Child Abuse and Domestic Abuse however it is hampered by brief questions referring to 'cruelty' which would affect ascertainment of cases of domestic abuse^[51].

Coming at the question from the other direction McKibbin compared 32 cases of physical abuse substantiated by child protective services with 32 controls. Mothers' records were searched for evidence of domestic violence. In the records for the controls 16% showed

evidence of domestic violence; however evidence was found in 56% of cases. The authors advise that in cases of child abuse that 'family violence' should be the focus, not just the child^[87]

In the UK the child protection guidance in 'Working Together' refers to a study of serious case reviews, investigations into case of child death or serious injury, where 53% of these cases were found to also include domestic violence^[73].

Another complex question is whether all these children exposed to Domestic Abuse need child protective services and what would be the appropriate assessment to perform to indicate which if any services they need? This is still matter for debate as child protective services cannot cope with the numbers involved and the efforts to produce awareness of the risks to children has not been matched by clear evidence of how to intervene in this difficult area^[88].

The co-existence of physical child abuse and domestic violence together is significant when the emotional impact is under investigation too. There is some evidence that it is the child abuse that causes the most significant emotional impact rather than the domestic violence but not that a child witnessing domestic abuse is more or less affected if physical abuse is also experienced^[63]. However looked at through the lens provided by Gryncz et al regarding the cognitions children may make about violence they observe which include assessing the physical risk to themselves, it might seem logical that children who had also been abused might be more likely to feel at risk personally from violence they see^[72].

Are there any other increased physical risks of injury to children in families where there is domestic abuse?

Rhodes et al interviewed caregivers bringing children to an emergency room in the USA. Multiple regression analysis showed that what they referred to as 'domestic conflict' (controlling behaviour and emotional abuse with or without violence) was associated with the 'unsafe home'. A Safe Home was one which was smoke free, gun free, had a smoke detector, had poisons locked away and whose children used seat belts regularly when travelling^[89]. This may suggest that these children may be more at risk of accidents although may just be a manifestation of the increasing injuries and deaths from accidents associated with increasing poverty and decreasing social status^[56].

Summary

In summary children are commonly aware of domestic abuse and present during violent incidents. Children seem to get injured in episodes of violence directed at their mother, they may intervene, be in their mothers arms, be used as a shield or just in the same room, and rarely this is fatal. This area is poorly studied and descriptive data only is available with no studies that would allow incidence or prevalence to be estimated.

There is an overlap between domestic abuse and child abuse with cases of each sharing a far greater incidence of the other than baseline population figures. Child abuse may influence emotional well-being in these cases more than domestic abuse. The risk of physical injury may be compounded by safety issues.

2.6 Health Services and Domestic Abuse

Another risk to children's health is that of missing out on established health promotion programme for children. A study in Cardiff refugees in 1994 showed that the children had statistically significantly lower immunisation rates when compared with the general child population of Cardiff and even when compared with the general practice population in Cardiff with the poorest rates in the city. There was also low coverage of routine well child checks such as that at 6 weeks and hearing tests at 8 months. Although there have been changes in the vaccination schedule and the emphasis of interventions to children has moved towards health promotion from screening, missing out still leaves children 'at risk of preventable infectious disease and remediable health problems' and a mother without the best advice on how to keep their child healthy^[1]. A further study in 1999/2000 found that rates for the pre-school surveillance and immunisation programme remained worryingly low with no birth visit recorded on the child health system for 57% of children, and no 18-month assessment for 38%. 30% of the 124 children in this study had not completed their immunisation schedule due by the date of assessment^[90].

A systematic review published in 2010 asked, among other questions whether 'patterns of illness-related visits' (to health services) differed in homes where there was domestic abuse. The reviewers came only to the conclusion that immunisation rates may be poorer but the lack of data retrieved allowed for no more firm conclusions^[91]. The Cardiff study described above was one of those few studies included in this that systematic review.

In order to provide effective services for children it is vital to understand why children do not attend for planned population based health interventions and why they might not attend to have their other health needs met. Failures to attend, if the interventions on offer are evidence based and effective, will impact adversely on their health.

Most literature describing women's use of services specifically addresses attendances to ask for help regarding domestic abuse^[92-97]. There is some describing what happens when women who have been living with Domestic Abuse attend for their own healthcare^[92, 95, 98, 99]. These raise the question of whether the same issues also impact on a mother's use of health services for her children. In a qualitative community based study looking at barriers to children accessing a domestic abuse programme Peled reports that one of the reasons for parents not using a service for their child was dissatisfaction with the programme they themselves had received from the same service^[61].

There are a few studies looking at programme for children who have lived with or who are living with Domestic Abuse and these may comment on parents' use or failure to use these services. There is very little written about health services for children in refuge. In general the great bulk of this literature is North American. It is also helpful to review the literature relating to the perceptions of health professionals about domestic abuse and consider how that might impact on the experience of women and children attending a variety of health settings.

Revelation of Domestic Abuse

A health care setting can be where help is sought specifically for domestic abuse, or help is sought for other health issues contributed to in part or wholly by domestic abuse, or for unrelated health issues. Accessing a service may lead to domestic abuse being revealed by necessity or by request from a health professional who is taking a relevant history and suspects domestic abuse. Although women may not disclose when asked ^[100] it is clear that they are comfortable with being asked in many health care settings ^[98, 101-104] and want the 'clinicians to have a low threshold for asking' ^[98]. Women may however have concerns that revealing domestic abuse may put them at risk of losing custody of their children to social services ^[43, 105, 106] indeed this threat may have been used by an abusive partner ^[100, 107]. Injudicious use of information arising from a disclosure can also put them of risk of reprisals ^[100].

Services in a refuge setting do not have this barrier to overcome but by necessity will refer out to more specialist services both within health and without. Women would need to be confident that the information passed on about their family's situation would be secure and confidential.

Women and health promotion

Wuest et al in 2003 published a qualitative grounded theory study of 36 mothers and 11 children who had left abusive relationships. Sampling included rural and urban areas in the USA and was purposive in order to explore emerging concepts. Women and children were interviewed with analysis running in parallel with data collection. Who conducted the interviews and the precise question route is not reported.

The study explores health promotion in these families using a broad concept of health as described in the Ottawa Charter. The authors conclude 'intrusion' to be the issue that is a barrier to families moving towards improving their health. Intrusion is described as 'external control or interference that demands attention, diverts energy from family priorities and limits choices'.

The four areas that they expand on are 'harassment and abuse', 'health outcomes from past and ongoing abuse', 'costs' and 'undesirable patterns of living'. The authors suggest that those whose job it is to plan or provide health promoting interventions should work to a model of empowering families to be able to live healthier lives or access health care rather than take the approach of targeting the health behaviours at a single person level. They postulate that only seeing the families in the context of the multi-faceted influences on their lives will allow an understanding of their health promotion issues ^[69].

What does this study add to the question about health needs of children in refuge? It seems to compliment the studies that show that at times mothers report being 'unable' to move forward with their children's health issues^[61, 108]. It suggests that unless services are in parallel and integrated with the programmes run by Women's Aid and other NGO's to support and empower women, offering health services to their children might be futile. Conversely, there seems to be evidence that children's mental health problems resulting in behavioural issues may be an 'intrusion' that prevents the family moving forward to a healthier future. Therefore addressing both these issues in a planned and coordinated fashion might have the best value in 'health promotion'.

This paper may also inform prioritisation of health issues in children. Those that are 'intrusive' in the family might be those most beneficial to target. This would leave simpler interventions, easier perhaps in terms of process and outcome and fulfilling accepted population targets such as immunisation, as less important. It could be that improvements in these might occur without targeted services because mothers would have the energy and resources to access mainstream services. Just targeting immunisations for example might have minimal effect alone. We do not have the evidence to predict this.

Finally the authors point out that all service providers have a duty not to contribute to 'intrusion' as they have defined it^[69].

Peled reports on a community domestic abuse programme using structured telephone interviews with 64 mothers and 41 fathers who had completed an adult group programme and who had children aged 4-18 years. The response rate was 62% and 28% respectively for mother and fathers eligible. It aimed to discover why there had been poor take up for their children's programme. A mixture of multi-choice and open-ended questions was used. Mothers described practical difficulties attending such as transport and timing. High family stress levels prevented attending the programme although a decrease didn't then mean the opposite. Some respondents denied that there had been violence or stated that the child had not seen violence. Some felt there was no need for the child to have services despite the violence. Others felt concerned that the programme might expose them to examples of more severe violence than their own. If the parents had felt unhappy in their own group programme they were concerned that their child might experience the same. Some teenagers had refused to attend. The emotional and behavioural difficulties of some children were seen as a barrier to attendance. Peled concludes that service providers need to consider 'structural barriers' meaning the practicalities of attendance, transport to and timing of groups for example. There also needs to be efforts to promote the importance of the programme and present its contents to parents to reassure them that their child will be safe and happy^[61]. The major difficulty with using the findings from this study is that it includes the views of fathers and the data cannot be separated. Generally in children's health research we are guilty of not taking fathers into account. However in the refuge setting it is decisions by mothers that we are interested in.

Finkelstein reports 115 semi-structured interviews at several sites in the USA of women with domestic violence and co-occurring disorders (substance abuse and mental health illness). Only 4% of these were in refuge, 76% were living in violent households. The aim of the study was to document participation of a group of mothers in the domestic abuse services for their children's emotional well being from planning through to administration. Part of this process included using 71 'checklists' undertaken when a child did not take up a place or failed to complete the programme. The most common reasons given were transport difficulties and the mother leaving the treatment service herself. Other mothers reported they were working on their own issues first, or their child did not need the programme. Some felt they did not trust the programme; some that other family members did not want the child to attend. In some cases it was due to a change in the child's address^[108].

Knowledge and attitudes of health professionals

A number of studies look at health professionals attitudes to women attending for healthcare who disclose or are known with live with abuse.

Wright in 1997 reports on a 30-item questionnaire filled in anonymously by 125/162 paediatric emergency medicine trainees in the USA. Their aim was to 'measure the preparedness to respond to battered mothers and to determine the potential obstacles and barriers to their effective response'. 'Preparedness' seems to be a mixture of knowledge and attitudes. The trainees are reported to show poor training in domestic abuse compared to that they had had in child abuse and neglect. A section at the end attempting to explore attitudes with 7 statements to agree with and one 'other' free text category revealed difficulties understanding why women remained in abusive relationships. There were concerns about the time constraints they worked under not allowing the issue to be dealt with also a feeling that as a paediatrician it was the child who was their patient not the mother. There were also feelings of frustration that 'nothing could be done'. It must be noted however only 55 respondents completed this free text section^[109].

Taft reports in 2004 a study using semi-structured interviews with GPs in Australia who had signed up for Domestic Abuse training. This sample is purposive in that it is for pre-training survey and to be followed up by a post –training study. Whether it shows the true diversity of attitudes and behaviours in GPs who do not present for training is uncertain but it certainly produced very diverse results per se. Urban/rural and male/female ratios were taken into account. 28 GPs took part in the survey and 7 went onto have more in depth interviews. This is a well-constructed and rigorous study. This study again shows a lack of knowledge (presumably why these GPs had signed up for training however) citing dangerous practice in one case and causing lack of confidence in others. GPs felt that the best advice was to suggest the woman leave immediately. They also reported struggling with time restraints and the notion of who exactly their patient was. If they reported violence because children were at risk they also put at risk their relationship with the family. Again they report frustration in dealing with these cases^[97].

Nicolaidis published in 2005 a study that attempts to understand the attitudes of primary care workers in the USA that might impact on their provision of care for a woman living in an abusive relationship they were unwilling or unable to leave. It was a convenience sample of workers put forwards for training by their managers and therefore not representative numerically of the totally of primary care practices in Oregon where it was based. A 5-point Likert scale was used to measure empathy in an attempt to count something that is very difficult to quantify. 57-59%% agreed with a statement saying 'A providers responsibility includes making sure a patient gets to shelter right away if he or she discloses abuse'. Those who agreed were statistically more likely to have expressed difficulty in empathising with a woman's decision to stay in an abusive home. Empathising with this decision was found to be easier if the woman was 'poor, uneducated, depressed or physically disabled'^[96]. What this study shows, despite difficulties in really measuring and understanding attitudes, is that ignorance of the fact that leaving an abusive relationship can be dangerous and difficult and is a complex issue leaves health providers ill equipped to understand the choices women make and to provide advice to help them to stay safe. An unpublished audit of Cardiff midwives' compliance with routine questioning about domestic abuse in ante-natal settings reviewed the notes of 98% of women who gave birth in October-December 2011. A questionnaire of midwives exploring barriers to enquiry identified language barriers, the presence of a patient's partner, insufficient training, and that enquiry made midwives feel "uncomfortable" ^[110]. Zink describes mothers asking for an 'empathetic and non-blaming' response from health professionals^[105].

The barriers and facilitators to receipt of services can also be considered under the following headings.

Access

- Awareness of services
- Acknowledgement of need for services
- Practicalities of attending for services

Acceptability

- Benefits of attending
- Risks of attending

Awareness of Services

A number of studies pick up on this basic issue of ensuring women are aware that services are available. A meta-analysis by Feder et al describing abused women's perceptions of using healthcare services shows women wanted posters and leaflets describing services. This also

had a dual purpose in that they indicate to women that the impact of domestic abuse would be taken seriously^[111].

Acknowledgement of Need

As discussed previously Peled found parents who denied the need for services for their child. This was however specifically in the case of service to mitigate the emotional effects of living with violence. This related to denial of violence, denial that children had witnessed violence or denial that the child needed support. This was a community-based sample and included father views^[61]. Denial of violence seems unlikely in a refuge but it may be an issue for mothers to acknowledge that the violence has impacted on their children such that a health referral is needed. There is little evidence but in the Cardiff refuge study mothers in general were glad to talk to a research health Visitor about all aspects of their child's health and accept her advice when referrals were necessary. The study did not follow up the results of referrals however to confirm take up of appointments^[90].

One small study of 25 women who had experience domestic violence reported that 11 of them fulfilled criteria for Post traumatic shock disorder (PTSD). Only 1 of these 11 had sought help for their child's emotional well-being compared to 6 of the 13 without PTSD. The mental health of women may be a barrier either to acknowledgement of need or instigation of seeking help and the practicalities of accessing services^[74].

Practicalities of Attending for Services

This can be separated, perhaps artificially into practical and psychological barriers.

A descriptive study of a refuge population in Cardiff showed clearly that 72% of women in refuge had no access to any appointments that were sent by post^[90]. Within refuge it will be important that any referrals are made such that appointments are sent to the correct address (albeit not that of the refuge itself as that is confidential but to an address which distributes post to residents).

Peled described timing of appointments as an issue with parents not wanting to take children out of school or take time from work. Peled and others report transport difficulties as an issue^[61, 92, 108].

A cross-sectional study of children who by parental report had 'witnessed violence' used the first cycle of the National Longitudinal Survey of Children and Youth in Canada. The cases were compared with population controls and found to have more 'health problems' (unspecified) but less likely to have seen a G.P. or paediatrician in the last year although more likely to have seen a nurse or 'other doctor'. The author admits that her cases were an underestimation and did not exclude child abuse. The cases were more socially disadvantaged and no adjustments are made statistically. However she postulates that this multi-disadvantaged group is more likely to use walk-in services like Accident and Emergency. This circumvents the problems of timing and receipt of appointments but also leads to a loss of continuity of care^[112].

Peled describes parental stress levels as a barrier to children accessing services and Finkelstein that mothers felt they had to 'work on themselves' first ^[61, 108]. This is as described in Wuest – intrusions such as emotional problems for mothers as a result of Domestic Abuse that prevent women being able to promote the health of their children ^[69].

Perceived Benefits

In order for children to attend for screening, surveillance, immunisation, assessment or management of a specific health issue their mothers must perceive the benefits. This will depend upon the effectiveness of the service provided and the mothers understanding of the value of the intervention^[61]. Zink describes mothers wanting information about how domestic abuse is affecting their children providing even this message is given in an empathic and non- blaming manner^[105].

Risks

Attending health services can present some risks to a family. If the sensitive issue of Domestic Abuse needs to be discussed privacy is important to both mothers and health professionals ^[93, 99, 111]. This includes discussions about abuse taking place away from children ^[111]. Privacy goes hand in hand with confidentiality but this is a wider issue with sharing of sensitive information, which may include a woman's current address, being an issue of concern^[92, 113].

The Inverse care Law

These families poor access to health care provides one example of the inverse care law first described in the South Wales Valleys by Julian Tudor Hart ^[114]. This states that the people who most need health care get the poorest health care. There are studies that attempt to look at why this might be. Fairbrother used the 1999 National Survey of American Families to test the hypotheses that increasing stress in low income families leads to poorer health and therefore greater use of health services or increased stress leads to less use of health services despite increased needs. This was a telephone survey of the 'most knowledgeable adult' for 9,854 children. The composite stress indicator they used was made up from information about family structure, economic hardship, turbulence (meaning house moves) and parental health. They tested the robustness of their indicators of family stress with multiple repeats of statistical tests using different combinations. Insurance status was adjusted for. Both in bivariate and multivariate analysis families with high stress indicators were less confident about receiving care (OR 0.51 p< 0.01) less likely to be having their children's health needs met (OR 0.42 p<0.01) and less likely to be having dental visits for the children (OR 0.61 p<0.61). Having a 'usual source of care' was only significant in the bivariate model. However family 'turbulence' was always associated inversely with having a 'usual source of care'. Overall these authors also state that whilst these families managed emergency care, routine appointments seemed to be more difficult^[115].

2.7 Health effects of homelessness

Homelessness includes in its definition in England and Wales not being able to 'live at home because of violence or abuse or threats of violence or abuse, which are likely to be carried out against you by someone else in your household'. Women on average leave abusive homes 7 times before they finally leave permanently^[5]. A Study in Cardiff noted that over the period of one year 15% returned home after staying in refuge and there were families who had more than one period of residence during that time^[90].

When the literature on homelessness in children is studied a substantial crossover with the literature about children and domestic abuse is revealed. Studies describing homeless populations where prior domestic abuse is sought reveal a high percentage (E.G.85% Cumella 1989)^[116] of the reason for homelessness being domestic violence. Researchers looking for a homeless population may in fact use domestic violence shelters as a place to recruit. Therefore teasing out the risks to health from studies looking at the health effects of 'homelessness' alone may be impossible.

An illustration of the crossover is a US study, which compares the mental health of those in domestic abuse shelters with those in homeless shelters. Only 13% -18% in the homeless shelter admitted to domestic abuse being a reason for homelessness although 21% had experienced violence in the last three months and 73% reported domestic violence 'ever' from their partner. Stainbrook found no difference in mental health 'caseness' between these two groups^[117]. Parental mental health as a risk factor for poor health in children might then be associated with either domestic abuse or homelessness although there is no evidence here of an additive effect.

Why might homelessness cause an increase in children's health problems?

Mothers mental health

Stainbrooks study of the mental health of mothers in refuge and homeless hostels seems to indicate that homelessness is associated with poorer mental health.

A study of homeless parents and children in Birmingham UK, using the Hospital Anxiety and Depression Scale (HADS), reports 78% of the 49 carers fell within the clinical range, 74% had clinical anxiety and 63% had depression. Just 12% of their population had become homeless due to domestic violence although of the 31% who had become homeless because of 'relationship breakdown' most admitted to being victims of domestic violence^[117].

The influence of maternal mental health on children is discussed in detail elsewhere. The factors contributing to poorer mental health for mothers are several and complex and homelessness might play some part for some women.

Mobility

The very large Adverse Childhood Experiences (ACE) studies in California and Georgia in the USA look at adolescent and adult health outcomes of factors in childhood. They found mobility (number of moves of house before age 18) was related to ACEs. I.E the more ACEs the more moves of house. Their studies have shown that the number of ACEs increases the risk of poor health outcomes in a dose response manner. Mobility on its own only increases the risks of alcoholism and teenage pregnancy once the other ACEs were allowed for. They postulate that this suggests that mobility and its impact on social capital may influence the health of adolescents and their health as adults. It may be however that ACEs have the most influence and these are common in homeless populations. Mobility they suggest could be used as a marker for ACEs which may be present and putting child health at risk^[118].

Resilience and Social Capital

Homelessness removes a child from social networks (extended family, school etc.) which may be key players in that child's resilience to adversity. These factors protect a child from mental health problems. Populations of homeless children studied prove to have high levels of difficulties in their lives as well as high levels of mental health problems. It is therefore not possible to pinpoint homelessness as a cause of mental health problems from any of these studies. However it can be postulated that given what we know about resilience, homelessness may compound the influence of other adversities^[116].

Poor Access to Health Care

Mobility is linked to poor access to health care. All appointment systems depend on an accurate address being held. In Cardiff in 1998 12% of all children were not on the 'child health system', which generated appointments for immunisations and surveillance, because as a city and a port there were high levels of mobility. For children in refuge a higher proportion were unknown to the child health system. When the information held was analysed for accuracy and mothers interviewed regarding forwarding post arrangements 73% of children in a refuge would fail to receive their appointments^[90].

Temporary Accommodation

Homeless children live in crowded conditions that may include communal cooking facilities. Overcrowding may facilitate the spread of infectious illness. Nutritional status may be compromised by restricted cooking facilities. Safety may be difficult to ensure in temporary accommodation where the effectiveness of stair gates, socket covers etc. depend on everyone being equally vigilant.

Is there evidence of increased health problems in homeless children?

The literature about homelessness also covers children sleeping rough and young people who are without families having run away. These children are not an adequate proxy for children living with their mothers in temporary accommodation. Studies in homeless hostels are the most useful.

A British study, which compared 133 homeless families with 29 control families, did show increased mental health problems and delayed communication skills in the cases. These children were more likely to have a history of abuse, be on the child protection register, have poorer school or nursery attendance and have mothers with mental health problems. 56% of them were homeless because of domestic or neighbourhood violence. Therefore the authors could not conclude that the children's difficulties were due to homelessness. This study also looked at health outcomes in 37 children using the Health outcomes scale for Children and Adolescents (HoNOSCA) but doesn't go on to describe the precise causes of the poorer health outcomes it documents ^[119].

An older British study showed that under 5s in temporary accommodation were more likely to be admitted to hospital for an acute non-surgical admission. However their cases were not more likely than controls to have a more severe medical condition but to be admitted for social reasons ^[120].

In parallel with discussions about domestic abuse and pregnancy homeless women have been found to have a greater risk of premature birth and low birth weight. This could be due to late booking, although the evidence for late booking being associated with these difficulties is thin ^[45].

Summary

Evidence for homelessness, which is caused by repeated flight from abuse affecting the health of children, is difficult to disentangle from the other multiple disadvantages that the homeless population suffers. Mobility may be a marker for multiple difficulties; this is suggested by the ACEs studies and seems to be supported by other studies looking at children in homeless accommodation.

2.8 Summary and statement of specific research questions, objectives, hypotheses

The questions posed at the beginning of this literature review were

1. How does living with, and fleeing from, domestic abuse impact on the health of children?
2. What are the mechanisms by which any impact occurs?

Table 3: Summary of literature review

Mechanisms	Evidence and possible health outcomes
<p>DA in pregnancy</p> <ul style="list-style-type: none"> • Violence • Maternal fear and stress • Use of substances harmful to foetus • Incomplete Ante-natal care 	<p>Clear evidence of risk of foetal and/or maternal death, association between violence and increased admissions^[20, 25, 29-31].</p> <p>Exploratory studies only regarding maternal stress^[22]</p> <p>Association between DA and substance abuse (tobacco, illicit drugs, alcohol) strong evidence of risks alcohol and tobacco present, less strong for individual illicit drugs^[24-28, 31, 35-42]</p> <p>Strong evidence for DA increasing late booking and poor attendance at ANC. Lack of evidence about the influence on outcomes for baby^[24, 30, 43-45].</p>
<p>Parenting</p> <ul style="list-style-type: none"> • Mothers abused as children • Maternal mental Health • Lower SES • Drug /alcohol abuse 	<p>Violence in childhood associated with increased risk of DA for women^[51, 121].</p> <p>Strong evidence for DA leading to poorer mental health for women^[47-49, 53].</p> <p>SES is associated with risks for violence^[42, 55, 56]</p> <p>DA is associated with increased substance abuse^[35, 57]</p> <p>Poor parenting increases risks to children's physical and emotional wellbeing</p>

<p>Dangerousness of home</p> <ul style="list-style-type: none"> • Witnessing abuse • Involved in abuse • Concurrent Child Abuse 	<p>Strong evidence of; children witnessing and being involved in DA, children receiving physical injuries, significant overlap between DA and child abuse^[7, 9, 70, 71, 74-83, 85, 86, 122, 123].</p> <p>Increased risk to physical and emotional well being</p>
<p>Poor access to health care</p> <ul style="list-style-type: none"> • Denial of need • Appointment systems • Concern for safety • DA influencing maternal ability to access services for children 	<p>Qualitative evidence of DA influencing perception of need for services, concern regarding safety of services and mothers emotional well being influencing ability to access service.</p> <p>Local evidence of inflexible appointment systems for mobile families and inaccurate data on child health system [1, 43, 61, 69, 74, 90, 100, 105, 106, 108, 111].</p> <p>Risks of unmet needs and poor access to preventive services.</p>
<p>Homelessness</p> <ul style="list-style-type: none"> • Overlapping group with multiple disadvantage 	<p>Evidence of increased mental health problems and developmental delays for children in homeless accommodation in England ^[116, 117, 119].</p>

The evidence in this review is very variable in quality. The literature is patchy as research in this area is relatively new. As would be expected in a new area of study descriptive papers heavily outweigh those of more methodologically structured studies of greater evidential value. The aim of authors has often been to highlight concerns rather than clarifying the precise increased risks to the health of children living with domestic abuse. Definitional issues influence collection of cases and controls. The overlap with child abuse is a confounder which is not always allowed for because of the difficulties of identifying this issue accurately and the ethical issues in this research area. There is a real lack of any evidence in many areas and some interesting new areas which are being explored but are too new to give clear evidence. Domestic abuse co-exists amongst a number of other disadvantages. Domestic abuse may occur to vulnerable women and families but it also increases their vulnerability. Mental health difficulties, poverty, social isolation, substance abuse and child abuse among others have a complex inter-relation with domestic abuse. They may serve to compound its impact or be mediators in its effect on children.

To specify the precise risks that one factor (domestic abuse) has on health and well-being, large carefully planned and controlled studies, which address the many confounders, need to be performed. These confounders include:

- Child abuse
- Mother's mental health
- Socio-economic status
- Parental education
- Age of child
- Community violence
- Family size
- Parental drug abuse
- Parental alcohol abuse
- Family criminality
- Ethnicity

Some of these confounders are often closely connected with domestic abuse in many families. Poor maternal mental health and substance abuse problems may be sequelae of domestic abuse^[21]. As such domestic abuse can influence the family situation influencing the health and well-being of a child by a number of mechanisms.

Therefore confounders, which may be accounted for in epidemiological studies, may be in fact components of the pathways via which domestic abuse exerts harm. Thus more recent studies, particularly those in the psychology literature use an ecological model to try to understand the complex interrelations between factors.

What can be conjectured is that the health care needs of an individual child will arise from multiple factors in the disadvantaged lives of these children. Some of these factors are sequelae of domestic abuse; some are co-existing factors that seem to predispose to domestic abuse. Some may be factors separate from domestic abuse but may provide a child with resilience or vulnerability to the impact of domestic abuse. Factors may directly influence health or have an indirect effect by acting as a barrier between the child and health service. However when considering services to children this distinction may not be as important as being clear about the outcomes which may indicate increased health needs. Access to health care is impeded in a number of ways, which may therefore prevent health

promotion and result in health problems not being addressed. However strong the evidence for any health intervention it will be ineffective if it is not accessed by the child that needs it.

Focusing on improving access to services for this group could allow an improvement in known and unknown health issues. Thus it may mitigate the influence of a poor evidence base. It also allows benefit to the whole group rather than targeting those known to have a specific health issues. The overall effectiveness, for example, of the child surveillance programme is regularly reviewed and evidence based practice updated, therefore improving access to these programme, and any follow up indicated, ensures an effective intervention is taking place.

This review suggests that living with domestic abuse poses risks to children physical and emotional well-being. When children are in refuge there is an opportunity for health professionals to offer help and services to address health issues. There is a need to explore exactly what the needs of these children and what service models might be effective and acceptable.

Aims and Objectives of the study

The aims are to answer the following questions:

1. What health services do children in a women's refuge need?
2. Is there a model of service delivery that would be effective and acceptable in meeting those needs?

Specific Objectives:

- A. Review the evidence for health service needs for this population
- B. Review the evidence for effectiveness of service models for this population
- C. Collect evidence of stakeholder opinions regarding accessible and acceptable service provision
- D. Design a model of health service using the above evidence

Chapter 3. Method

The method chosen for fulfilling the above research objectives is a systematic health service needs assessment. This method is described by the Health Development Agency as a

‘Systematic method for reviewing the health needs and issues facing a given population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities’^[124].

It is important however to be clear that the concept of **need** means ‘ability to benefit’ and that there is an imperative to be rigorous about the effectiveness of interventions proposed in terms of health benefit ^[13, 125]. Benefit itself can be a wide concept, from improving results of surgical procedures by technical methods to providing adequate support to caring relatives to help them cope with their role. What these benefits might be for this group will be explored.

This definition refers to ‘issues’ and clearly these are not the same as needs, but in terms of the group of children in refuge it has been argued earlier that there are ‘issues’ that impact on their health and prevent them accessing health care which must be taken into consideration in order to allow services to be effective. It must not be taken for granted however that it is just health services which improve health and although health services are what is under consideration in this study it will be important to note the broader aspect of service delivery by other statutory and non statutory bodies as well as wider determinants of health ^[126].

A Health Service Needs Assessment although multi-faceted and time consuming allows evaluation of available research evidence and an exploration of the real experience of the group under consideration to an attempt to produce a solution in terms of a model of care. This then must include an in built evaluation to show its effectiveness. It is generally performed or requested by a commissioning group and requires a team of researchers and liaison with the population and their health services to involve them in the process. It provides a possibility of improving a situation as well as engaging consumers so that they feel consulted and embrace any changes suggested.

There are three approaches to a systematic health service needs assessment which can be used together to produce the information required to design service model.

The Epidemiological approach

This includes the following elements

A. Statement of the problem

Domestic Abuse is a common problem in the United Kingdom and a significant number of children live in homes where Domestic Abuse occurs often secretly. Women's Aid is an organisation that provides services to women and children living with Domestic Abuse including a network of refuges to which women that need to leave an abusive household can run with their children. They are given accommodation, and support to address their abuse and move forward with their families. Cardiff Women's Aid provides a number of refuges amongst other services. There is evidence that children in these refuges have considerable unmet health needs and particular difficulties in accessing the health care services to meet them. Ignoring these will result in poorer outcomes for these children with respect to health, education, social functioning, and economic status and, for some, the criminal justice system. There is a case for examining the health service needs of these children when in refuge to ascertain whether they can be met more effectively. The population whose health service needs are to be assessed in most cases is confined to a single diagnostic category E.G. diabetes but this method can be used for the combined health service needs of a defined and specific population. In this case the group is 'children age 1-16 residing in a refuge for women fleeing domestic abuse in Cardiff'.

This health service needs assessment takes place in a time of cut backs and austerity and therefore this climate must be taken into consideration. It also takes place at a time where Cardiff Women's Aid are expanding the range of services available to children and young people who come through refuge and have introduced a new assessment system based on work (Appendix 2) to plan to meet the needs of young people. This is due to their own recognition of the needs of the children they see. This makes this a timely review in order for the health board to work effectively with an organisation who are providing in a significant way for the health needs of children and young people. The points at which health care can be accessed, and the pathways into those health services need to be clear, effective, and understood by all parties.

B. Sub-categories

Subcategories must be described. In order to plan what health services might be needed any sub-categorisation should divide the disease or problem into useful predictors for the element it would require^[13]. There is no accepted sub-categorisation of the health needs of these children. The mechanism by which their health may be compromised has been explored in the literature review. This suggests risks to physical and emotional health as well as barriers to access mainstream health services. Therefore the following subcategories were used.

a) Increased Morbidity

Mental health and emotional well-being

Safeguarding

Physical health

Development

b) Poor access to preventive and therapeutic services

1. Primary prevention – low coverage of immunisation and the health promotion opportunities provided by these and other surveillance appointments
2. Secondary prevention – low coverage of surveillance for early childhood problems
3. Tertiary prevention – difficulties of accessing healthcare due to mobility, isolation, anxiety, logistical difficulties etc.

C. The prevalence and incidence of the group and subcategories are then set out using the research literature and local and national data collections where appropriate. Measurement of prevalence and incidence in the context of a health service needs assessment is required to help quantify the level of need. Raw data itself if available may not however be useful in deciding on the numbers of people who might benefit from health services^[13] or benefit from targeted rather than universal services. Then each sub-category is considered separately in terms of the raw data if available.

D. Current services are described

E. Effectiveness and cost-effectiveness of interventions are then described. Prioritisation of interventions has to be part of this analysis.

F. A quantified model of care and recommendations are made

G. Outcome measures, audit methods and targets are set

H. Future information and research requirements are described.^[13]

The Comparative approach

This arm of the study looks at services for this group in other areas and compares them with the local situation. It is imperative however that within that analysis differences in the population being served are clarified. Ideally a researcher is looking for services that have undergone evaluation and thus whose worth in terms of health outcomes and stakeholder

satisfaction is quantified. This may provide information regarding effectiveness and cost – effectiveness. It may suggest a form for a local service model.

The Corporate approach

This seeks views from key stakeholders about the needs of the population. There is a risk here of becoming rather ‘elastic’ about the concept of need and this has to be considered carefully. However cost effective services depend on those with the capacity to benefit accessing said services. Using a corporate perspective for a HSNA can have a variety of purposes. It can fill a void where there is little epidemiological data. It can be seen as a ‘rapid appraisal method’ where a population and those who serve it can be canvassed to produce a shared opinion of ‘needs’ and how they should be prioritised. The process of involvement can be used to encourage a feeling of ownership of the resulting service model because of the contributions stakeholders have made. Ascertaining views of stakeholders, that is the population and the professionals who serve a population, for analysis of health care service needs is included in order to develop acceptable service provision ^[2].

There is an argument that these views do not contribute directly to the assessment of ability to benefit from health care services. Stakeholders understanding of ‘need’ may stray far from this specific definition. Powles is very clear that a truly academic study of health service needs must use the word precisely in his advice to trainees in the public health arena ^[125]. Whilst embracing that advice our knowledge of this group of children and their families is that they have very poor access to mainstream health care services however much proven benefit there may be from these. Therefore it can be argued that it is vital to supplement the epidemiological perspective with this corporate arm for the following reasons.

Understanding felt ‘need’ by key stakeholders

‘Felt need’ is not the same as the ‘need for health services’ as defined more precisely in an academic process for planning services. Despite this knowledge of how these two might differ or overlap is valuable information. It is a starting point for understanding the population and those seeking to serve them.

Exploring the reasons why this population accesses current healthcare services so poorly

Any model of service suggested needs to attempt to circumvent the barrier to accessing healthcare services already evident in order to be effective. Exploration of these barriers in this specific population should assist this process.

Exploring stakeholder priorities

An understanding may be uncovered of how and why certain healthcare needs are prioritised. This may be in terms of their impact on the child, or the wider family unit. It might perhaps be due to the current impact that a health problem is having on the ability of a family to move forward to a more settled future.

Whether or not the epidemiological arm of this study points to the same 'needs' for health services and agrees with the stakeholder priorities there is value in understanding this. There may be a wide disparity between different groups of stakeholders themselves. This will need to be taken into account of 'selling' the benefits of any service model to those who are anticipated to be using it. Communication with stakeholders to bring them from different points of view to a shared understanding of why a service model has been suggested requires an understanding of these.

Exploring the concept of Benefit

These families are coming to refuge in a shared crisis. Although this study is concerned with children's health services it has been argued that maternal and child health and use of health services is inextricably linked ^[100]. Peled's concept of 'intrusion' reminds us of this ^[61]. An improvement in the physical or mental well being of a child having an impact on a mother and her ability to move forward in a difficult situation could be hypothesised. Therefore it is possible that health care services for children might benefit the whole family. It is not known whether this information will emerge but it should be noted carefully if it appears. The answer to this question is over and above what is sought in this study but there may be value in being open to a wider concept of benefit.

To collect data fulfilling these 3 approaches the following methods were used.

1. Critical Review of literature

The literature review of mechanisms by which domestic abuse might affect the health of children was used to predict subcategories under which the needs for health services could be explored. The saved searches in Endnote were then re-interrogated under those headings. Abstracts were scanned for evidence of prevalence data and those papers reviewed. As the study developed and moved through the elements of the epidemiological arm additional targeted searches were included to seek out evidence of effectiveness of service models or professional roles where available (Appendix 1).

Studies included were those describing health service needs of children in refuge or descriptions of models of service to children in refuge wherever they take place and whether they address physical or mental health and /or effectiveness of universal or targeted services.

Where data on the refugee population was thin studies were included which described health needs of children living with domestic abuse in the community. Where there was no evidence of effectiveness with children living with domestic abuse in refuge or in the community papers were included if they referred to similar vulnerable groups or to all children. For each section the most relevant papers were used in preference to those of lesser relevance depending on the body of evidence available.

2. Interventions for children in refuge were sought by the use of professional networks

- a) A letter to the journal of the British Association of Community Child Health asking paediatricians for examples.
- b) Posting on a UK academic Domestic Abuse forum asking for examples.
- c) Individual emails to key figures involved in the provision of services to vulnerable groups.
- d) Follow up of any service examples provided in key stakeholder interviews

3. Review of National and Local Guidance

National and local guidance for services to vulnerable children with safeguarding concerns were collected and reviewed. This was performed in anticipation of a low yield from the above strategy, and because children in refuge fall into this category. This allowed consideration of overarching standards for any health services. (appendix 1)

These approaches are aimed at allowing benchmarking against services with proven efficacy and efficiency, and against standards for safeguarding of these vulnerable families, if this were possible.

4. Qualitative study of views of key stakeholders

The research objectives for this section are

- To ascertain the views of stakeholders about the needs for health care services of children in refuge
- To ascertain views of stakeholders of the ways healthcare services could best be provided and why
- To ascertain which of these needs or services should in the opinion of those involved with this group of children be prioritised.
- To collect information describing current services

The data to be collected consisted of knowledge, perspectives and opinions. These can be collected by interviews or group interview methods. One to one interviews allow for a greater depth of data, sensitive issues can be raised; complex matters can be explored and clarified. However sampling is restricted by the time involved in collecting and analysing the copious data. Less depth can be obtained using the group interview method although this allows the researcher to use interaction between members to collect data about knowledge attitudes and opinions. Each method has slightly different strengths and weaknesses that need to be taken into account in planning and analysis.

In order to fulfil the sample proposed some of those identified could fall into groups that could be interviewed together. Ideally these groups although having common features should not be familiar with one another in traditional focus group methodology. They then arrive without a past that might provide a 'group view' of the answers to your questions or might affect what each might be prepared to contribute in view of their future relationship. In practice group interviews are often done with those who know each other and the impact of this must be considered in the analysis.

Semi-structured interviews with key stakeholders could be considered as 'elite interviewing'^[127]. These persons are in key positions of influence and have an expertise in the area of domestic abuse. They will have an ability to see the broad perspective of service provision and will need to be satisfied with any future plans to change this. Their cooperation may be essential in the long term.

In practice using this method the most flexible data collection method to ensure the identified targets for sampling professional views was the face-to-face interview. Professionals were willing to spare 45 minutes to one hour to meet the researcher where as attempts to get several together in a room posed far more timetabling difficulty. The

researcher could be flexible as far as possible to time and date and travelled to the interviewee minimising inconvenience. The disadvantages of this method was that it took up more researcher time, it did not allow the perspectives to develop by any group interaction and it did not bring stakeholders together to discuss priorities which might be considered to be advantageous in a project such as this. If this had been a commissioned HCNA rather than an academic exercise then stakeholders might have been expected to allocate more time to their involvement.

Sampling

Systematic non-probabilistic sampling was used. This allowed careful selection of people and groups who would be in receipt of services or closely involved with providing other services to women and children in refuge. Choice of stakeholders therefore was made using the criteria that they should have

Professional or personal firsthand experience of Domestic Abuse

or

Professional or personal firsthand experience of children who have lived with domestic violence.

The sample included professionals whose job involved the planning of services or the provision of services to this group of children and mothers of children in refuge.

Professional stakeholder sampling

The key providers of services to this group of children are as follows

Cardiff Women's Aid Children's and Young Person's Team

Cardiff and Vale University Health Board (Child Health and Primary Care)

CAMHS network

Cardiff Children's Services

Cardiff Education Department

South Wales Police Authority

An initial plan for key stakeholder interviews was drawn up. For each service to children in refuge the organisational structure was considered. There are advantages in selecting a person with a strategic role and a worker at the level of direct contact and work with children in refuge. A strategic role lends expertise in seeing how services to this group fit into the 'bigger picture' of health services and facilitating change in organisations. The operational role lends expertise of working within the current services and direct contact with the client group. This method also raises awareness of the study across organisations. Subjects known to the researcher and more obvious candidates were contacted first for

convenience, as information about services emerged from the interviews participants were asked for their advice where appropriate. This snowballing technique was felt to be helpful in identifying people who other professionals valued in terms of their experience with these children and/or who might fulfill an important role.

The professionals interviewed included 2 from Cardiff Women's Aid, one with strategic responsibility, and one with direct responsibility for providing children's services. The designated health visitor for the homeless in Cardiff who works in the refuges was the obvious choice from primary care. A paediatrician with a strategic role for child protection and a clinical community paediatric caseload and a member of Cardiff education department inclusion team whose remit covers vulnerable children in education were also interviewed. Although no member of our local CAMHS team has experience of close working with refuge, or had at the time of the interviews any links with refuge, a PMHW was interviewed. The South Wales Police child protection unit in Cardiff declined feeling they had little to add to this study. It did not prove possible to have permission to interview a Children's Social Worker (SW). Just after the interviews were complete a SW was to be appointed half time in the Intake and Assessment Team (which investigates safeguarding referrals) and half time in refuge. That person would have been a valuable interview once established in the post.

Mothers of children residing in Cardiff Refuges

In order to access mothers in refuge the researcher liaised closely with Cardiff Women's Aid. They were very committed to supporting this study, which they felt was collecting information that was lacking and of potential benefit to their clients. The support from all levels of the organisation made this possible. The resources of the study did not allow extension of this data collection into BAWSO (Black and Asian Women Step Out) refuges in Cardiff. This would have required funding to use interpreters in order to collect valid data.

This group of mothers is in crisis and has numerous concerns about what they have fled from and what the future holds for them and their family. In order to answer the research questions for this arm of the study it seemed preferable to speak to women at this time when any health care services might be offered. Within Cardiff Women's Aid refuges this is shorter time frame than in other areas because of their commitment to a maximum twelve-week stay in refuge working with other housing agencies to achieve this. The researcher has piloted gathering qualitative data from mothers with Cardiff Women's Aid in the past using the focus group method to discuss their concerns about their children's health ^[1]. This pilot showed that this could be a useful method as the mother's were very happy to be involved despite the difficult circumstances that they were in. However a very flexible approach had to be taken to successfully get a small group together as the volatile lives of these mothers meant that they had many other priorities and issues which would prevent them being available even when they had agreed to be present for a group. Any research with mothers in refuge has to respect this and not interfere with their ability to manage their challenging issues. Small numbers for a group had to be expected due the nature of the houses and the

need to take the research to women who might otherwise be excluded from having their voices heard.

Participant information leaflets were provided to a staff member of Cardiff Women's Aid who understood the study and what was being asked of the mothers (appendix 3). She discussed these with mothers at house meetings or individually as was felt appropriate and practical. When a number of women were available the researcher made herself available to run the group as flexibly as possible. It was difficult with this sampling technique to adhere precisely to the ethical guidance of 2 weeks to allow participants to read and understand the research before the interview. This was done where possible but the balance was felt to lie with giving women a chance to participate rather than ruling them out and mirroring their experience of health care services by adhering strictly to timescales and fixed appointments.

If the researcher arrived to find just one mother available and willing the data collection continued as a semi structured interview informed by the focus group question route. This allowed any mother who had made herself available on a certain day to participate. Three planned visits to talk to groups of mothers only resulted in views being collected from 5 mothers who between them had 11 children. The age range of the children was from a few weeks old to 10. The average age was 6.6 years. Despite these small numbers useful information was gathered. Care has been taken in this write up to leave out any details that might identify families without diminishing the impact of some of their experience where possible.

Data Collection

Questions were developed, semi-structured interviews with key individuals and focus group question routes for mothers (appendices 3 and 4). For the group interviews questions were developed which asked for answers to the research question from each group but framed appropriately. Open ended, unambiguous questions were used. The sessions started with an introductory question asking for a professional's role with children in refuge or for mothers how many children they had and their ages. Questions then moved from general to more specific items with un-cued question proceeding cued questions and requests for positives preceding negatives. At the end a summary was given and respondents asked whether all points of importance had been covered.

All interviews were recorded using a digital recorder and field notes taken by the researcher. All recordings were transcribed, and anonymised during transcription. Transcriptions were then loaded into NVIVO for analysis.

Ethical Approval

This study was approved and sponsored by Cardiff University. Because employees of Cardiff NHS Trust were to be interviewed the South East Wales Research Ethics Committee also reviewed it and approved it.

Chapter 4 Results

Prevalence and incidence data indicating health service need by subcategory

a. Areas of increased morbidity

1. Mental Health and Emotional Well-being

Definitions

In order to measure Mental Health and Emotional well-being there must be a definition of terms used. The definitions below are taken directly from the Welsh assembly Government (WAG) document 'Everybody's Business' as they are widely accepted and those by which services are planned in Wales.

*'Mental Health Problems may be reflected in difficulties and/or disabilities in the realm of personal relationships, psychological development, the capacity for play and learning, development of concepts of right and wrong, and in distress and maladaptive behaviour. They may arise from any number or combination of congenital, constitutional, environmental, family or illness factors. Mental Health Problem describes a very broad range of emotional or behavioural difficulties that may cause concern or distress. They are relatively common, may or may not be transient but encompass **Mental Disorders**, which are more severe and/or persistent.*

***Mental Disorders** are those problems that meet the requirements of ICD 10, an internationally recognised classification system for disorder. The distinction between a Problem and a Disorder is not exact but turns on the severity, persistence, effects and combination of features found.*

*In a small proportion of cases of mental disorders, the term **Mental Illness** might be used. Usually, it is reserved for the most severe cases. For example, more severe cases of depressive illness, psychotic disorders and severe cases of Anorexia Nervosa could be described in this way.'* ^[128]

General prevalence

Within Great Britain the mental health and emotional well-being of children and young people in general has been a cause for concern and regular review over the past decade or more. Emotional problems in childhood are relatively common, increasing where there are known risk factors. A prominent series of health care needs assessments edited by Stevens and Raftery includes Child and Adolescent Mental Health published in 1997. They provide figures for the overall prevalence based on studies from the 1970 and 80s, not all of British children. They quote rates for 3 year olds in an 'urban community' of 7% moderate to severe disorders, 15% mild disorder. At ages 9-11, 12% overall in rural areas, 25% in inner London^[129].

There have been large surveys for the Office of National Statistics (ONS) of the children and young people of Britain. The first was in 1999^[130] and was repeated and comparisons made in 2004^[131]. The age range surveyed was 5-16. One in 10 children had a 'clinically diagnosable mental disorder'.

- 4% emotional (anxiety or depression)
- 6% Conduct disorder
- 2% hyperkinetic
- 1% other (Autism, Tic or Eating disorder or Selective Mutism)
- 2% had more than one disorder.

Girls were slightly over represented in the emotional disorder category, 54% girls whereas the whole sample had 50% girls. Boys were over represented in the Conduct disorder group, 60% were boys. Boys were in the majority in the Autism and Hyperkinesis groups.

Age influences rates of mental disorder, at ages 5-10 10% of boys and 5% of girls had a mental disorder. At 11-16 the figures were 13% boys and 10% of girls.

The prevalence's were compared between the 1999 and 2004 studies and the differences were minimal once differing diagnostic categorisations were accounted for^[132].

Prevalence in a particular population has been shown to be influenced by risk factors. These include lone parenting, reconstituted families, low parental education, neither parent working, lower income, lower professional status, disability living allowances to someone in the household, non home ownership, and living in a deprived area^[131].

In the 1999 survey for the ONS the GHQ-12 (General Health Questionnaire) was used to screen parents for psychological distress. Children of parents screening positive were 3 times more likely to have a mental disorder and the plotted results suggested a dose response effect. They also took a measure of 'discordant families' and in these mental health disorders were twice as likely to be present in the children^[130].

The 2008 survey for the ONS examined the persistence of emotional and conduct disorders in the children diagnosed in 2004. Mother's poorer mental health was associated with the persistence of these disorders as was mother's lower level of education and low income. New cases of mental disorder were found amongst children and young people who had not had a disorder 3 years previously. Girls were more likely to develop an emotional disorder (4% compared with 3% of boys). Emotional disorders were more common in families where mothers scored high on the GHQ-12 for psychological distress, if parents were unemployed, low income or living in rented accommodation. It was more likely in reconstituted families. Conduct disorders were more likely in boys (4% compared with 2% of girls). Conduct disorder was more likely in lone families or those who had become lone families since 2004 and where mothers had high scores on the GHQ-12, parents being unemployed, poor educational level of mother and low income. Reconstituted families also had an increased risk of Conduct disorder.

Both Conduct disorder and Emotional disorders were more likely to occur where children and young people had 3 or more 'stressful life events'. Included in the list of events enquired about from the children's parents were parental separation, parent had serious mental illness and parent had a problem with the police involving court.

In the WAG strategy document; Child and Adolescent Mental Health Services, Everybody's Business Sept 2001^[128] the prevalence for Wales is quoted as 40% of children and young people having 'recognised risk factors', 30-40% 'may at some time have a disorder' and 'up to 25% (depending on environment and circumstances) have disorder'. These statements seem to be based on the data used in the CAMHS needs Assessment 1997^[129] and the 1999 ONS survey^[130]. The ONS survey information suggests that the prevalence of mental disorders in England Scotland and Wales are similar.

In summary the general prevalence of mental health disorders in children and adolescents in Wales is between 10% and 25%.

Risk factors for mental health problems and disorders

There are a range of risk factors which produce the 'environment and circumstances' that predispose to the higher prevalence either of mental disorder being more likely to occur or more likely to persist. Table 3 explores factors associated with Domestic Abuse that are risk factors for mental health disorder.

Prevalence within children exposed to domestic abuse

The literature relating to emotional and behavioural results for children living with domestic abuse is extensive, mostly from North America, and variable in approach and quality. In order to use this literature most effectively within this project two of the major meta-analyses are used that have been published in peer-reviewed journals in 2003^[62, 63]. Good quality studies have also been used which may not have been included or post date these meta-analyses but which add considerably to the evidence we have or throw light on aspects valuable for the breadth of this project.

There are three major areas of emotional difficulties described for these children. Internalising problems (depression, anxiety, somatic), externalising difficulties (aggression, attention, conduct disorder) and Post traumatic stress disorder (PTSD).

The background prevalence of emotional and behavioural problems in children and adolescents is 25%^[128]. However amongst this 25% will be children whose difficulties are in part the results of family conflict, child abuse and domestic abuse. CAMHS categorise by diagnosis and do not screen for domestic abuse so the origins of children's problems receiving their services may not be measured^[66].

The meta-analysis by Kitmann includes 118 studies that looked at psychosocial outcomes of inter-parental violence. She looked at effect sizes in all the studies, zeroing any that were reported as not significantly significant effects. She calculated average effect sizes for 5 types of study design; witnesses v non-witnesses, witnesses v witnesses of verbal aggression, witnesses v physically abused children, witnesses v physically abused witnesses

and correlation studies. She also reports that where the populations were drawn from (refuge, community) only seemed to influence effect size in correlation studies. The overall effect size was $d=-0.34$. She concludes that '63% of child witnesses were faring more poorly than the average child who had not been exposed to domestic abuse'^[63].

Wolfe (after Kitzmann) excluded studies using comparison between groups all exposed to domestic abuse in varying degrees or comparison with child abuse. He also excluded studies that measured children's behaviour in simulated conflict situations. In all Wolfe included 41 studies, 31 of which overlapped with Kitzmann but did not include the other 81 she had used^[62].

Both studies conclusively show that living with domestic abuse increases the emotional and behavioural difficulties shown by children. Both fail to show firm age or gender differences. Not all children seem to have difficulties despite living with domestic abuse. These meta-analyses do not seek to explore how domestic abuse exerts its influence on children but Kitzmann did show that witnessing physical violence seems to have a more detrimental effect than just witnessing verbal aggression. This is borne out by comparison with studies of marital conflict where there is not domestic abuse^[133].

Table 4: Risk Factors for mental health disorders in children in refuges for women fleeing domestic abuse – adapted from Stevens and Raftery ^[13].

Risk Factor	Influence on risk of Mental Health problems	Association with domestic abuse or flight to refuge
Family breakdown	Lone parenting increases conduct and emotional disorders ^[131]	100% of children in refuge although a number return to the 2 parent family they came to refuge from.
Marital Discord	Separate from domestic abuse marital conflict adversely influences children's emotional well-being 2x risk ^[130, 133]	100% of children in refuge
Parental mental illness/depression	1.2 -4 x increase risk	Rates of mental health problems for women Depression 46% Suicidality 18% PTSD 34% ^[134]
Parental criminality	2-3x increased risk	Violent assaults
Physical abuse	2x increased risk	30- 60% of children who have lived with Domestic abuse ^[80]
Neglect	3x increased risk	
Emotional abuse	Increased risk	As per the definition in Working Together to protect children 100% of children in refuge.
Sexual abuse	2x increased risk	Increased risk in Domestic abuse ^[85, 86]
Socio-economic circumstances	Disadvantage is associated with increased mental disorder	Financial abuse can exacerbate disadvantage as does the need to flee to refuge
Housing and homelessness	It is not possible to produce risk figures purely for homelessness. Studies measure the multiple disadvantage leading to homelessness including domestic abuse ^[135]	100% of children in refuge using the wider definition of homelessness Many families homeless due to domestic abuse

Local prevalence

Local refuge data reflects this evidence. The revised Rutter scale, a validated questionnaire using maternal reporting, was used in the study in Cardiff refuges in 1999, was administered by a research health visitor. The scale was chosen because it was validated across different ethnic groups and some of the children included were from BAWSO refuges. A score of 11 or above indicates that there is a need for further psychological assessment for that child and thus this was used as a cut off score to identify such children. Whatever difficulties these children have are not just a consequence of Domestic Abuse but of a number of associated factors that influence their emotional well-being. However this does provide one measure of the needs of this population of children. Not all these children scoring above 10 will need specialist CAMHS; it may be that many can be managed by tier 1 services. It does show that the burden of emotional health needs in this population is considerable, and that almost a half of children in refuge may require support to address their emotional well-being at some point in time.

	No. of children assessed	No. (%) of children scoring > 10	Median (range) score
Boys	51	22(43)	10 (0-42)
Girls	50	27(53)	11 (0-35)
Age (years)			
3-4	26	14(54)	11 (0-33)
5-15	75	35(47)	10 (0-42)
White	62	40(65)	14 (0-42)
Other ethnic group	39	9(23)	4 (0-24)
Total	101	49(49)	10 (0-42)

Table 5 revised Rutter scores for 101 children in refuges in Cardiff ^[90]

2. Safeguarding

The increased risk to children living in homes where there is domestic abuse of all four forms of child abuse has been discussed previously. Children in refuge have escaped episodes of violence between adults within the home and may not have contact with the male perpetrator who may pose a risk to them. However of the 148 children studied in Cardiff refuges in 1999, 22 (15%) returned home to the perpetrator from which they had fled^[90]. There is evidence that some children are at risk from either parent^[79]. Mothers who have endured domestic abuse have an increased risk of depression and other health risk behaviours that may influence their parenting^[21, 35, 134].

Unfortunately no local data is available on the prevalence of domestic abuse in children accessing social service support as children in need or at risk of harm, as this information is not requested or recorded systematically. There is guidance about recognising and acting on concerns about the welfare of any child for health professionals and recognised levels of training depending on their role. The competence of health professionals to work with this group of children should be underpinned with an understanding of the overlap between domestic abuse and child abuse. There will be an increased workload in safeguarding for health professionals working with this group of children that has not been quantified.

3. Physical health

Do children from refuge have an increased need for health care services other than for their emotional well-being or for the wider safeguarding role? Are we able to quantify their needs over and above the average child population?

A systematic review by Bair-Merritt et al of the literature up to 2003 asked the question: do patterns of illness and illness related visits (to health care providers) differ between children in homes with Inter Partner Violence (IPV) and homes without IPV? It revealed that evidence was not yet available to answer this question at that time. The inclusion criteria, which required studies to have a control group, left them with a handful of studies only^[91].

Since then the pattern of studies appearing in the literature has been similar with cross-sectional studies providing data of concern being the most prevalent in what remains a relatively sparse literature. Information for this section to illustrate these concerns and the strengths and weakness of the evidence therefore has been drawn from the English language literature from throughout the world. The findings however vary in their relevance to the children in Cardiff.

Developing Countries

Karamagi et al in a cross sectional study in Uganda of 457 mothers selected using a random cluster method found an association between violence from a partner and the ill health of their infant under six months old. This was measured using maternal report of illness in the

last fortnight. They postulate stress due to violence influencing breast feeding rates via oxytocin levels. They do suggest however that they cannot with this method rule out that an ill child might raise stress levels and contribute to violence. Low levels of maternal education and poverty could be associated with both violence and poorer child health^[136].

Aisling-Monemi et al in Nicaragua examining child mortality in under- 5s used cases and matched controls. They report that 27% of the risk of child mortality in under- 5s appeared to be due to violence between the mother and her partner. Mother's education, age, parity and area of residence also influenced the risk significantly. However in this study again child abuse data was not collected and the authors wonder if they were in fact picking up the influence of poverty^[137].

Some studies concentrate on a specific diagnosis or problem. Subramanian et al use a national cross sectional survey in India with over 400,000 women in their final subset for analysis. They found that after analysis allowing for multiple confounders they report an increased risk of asthma for all family members where there is domestic violence (OR 1.15- 1.19). They discuss stress as a risk factor for asthma^[138].

A cross-sectional survey across 5 South American countries of married couples only measured 'couple interaction'. They describe their interview data as 'comparable' from country to country. Interpersonal violence was found to correlate with shorter height for age after analysis and they postulate this is mediated by nutritional status^[139].

Developed countries not including the UK

Hasselmann in Brazil used a case control study and multivariate analysis to investigate child Severe Acute Malnutrition (SAM). Severe domestic violence was significantly associated with children admitted with SAM rather than children admitted for routine surgery. The Conflict tactics Scale was used to measure violence but the study admits not to measuring child abuse^[140].

Mirroring the Adverse Childhood Events (ACE) studies Flaherty et al attempted to measure the impact of adverse events as early as age 6. The population, in the USA, was a high risk population geographically diverse but all children identified as vulnerable. Within this population domestic violence appears as one of the ACE measured. By age 6 an increase in ACEs was correlated with an increase of 'poor health' measured by maternal report using a recognised global health rating and occurrences of 'serious illness' in the last year although what constitutes a serious illness is not clear^[141].

An overall measure of physical health is investigated in a number of studies. Matud in the Canary Islands used a case series of women attending for assistance and information at centres on the islands. They were asked if they would like to participate and a snowballing technique was used to sample their friends and workmates. It is not clear whether this is a skewed sample as it is not possible to tell what kind of information centres these were. A questionnaire to collect data about abuse was developed by the author and did include child abuse. There is less clarity about what questions were asked to determine children health. However they report that the presence of domestic violence was significantly positively correlated with more health problems and if child abuse was reported there was a significant increase in addition to this. The author compares this data with Canary island

health survey data; there is a difference but the comparison may be unhelpful because of differences in ascertainment of data^[142].

Graham –Bermann and Seng interviewed mothers in the USA who were recruited through a head start programme and thus vulnerable families. They interviewed 160 women collecting data about community violence and domestic violence using standard questionnaires. A Likert scale was used for child health ratings from mothers. They compared the families where there was domestic violence with the other head start families and they also used national health survey data including a subset of 'poor' children. Within the Head Start families violence exposure did not increase the rates of health problems. Comparison with the health survey data particularly the 'poor' subset was also not very significant. The authors postulate that part of the reason for increased health problems in the poor subset may be due to violence exposure in this data that is not measured. They subject their data to hierarchical analysis and show that the risks for total health problems were increased by exposure to domestic violence and child abuse together, mothers substance abuse and mother's health. Post traumatic stress symptoms in the child were the strongest predictor of health problems^[143].

Peek-Asa et al reviewed a large cohort of 1,675 rural 2 parent families in the USA and report on a subset of 306 children whose families had answered questions about IPV previously and whose standardised test scores were available. Only domestic violence was measured, child abuse is not mentioned, Questions were asked about general health, vision, and hearing; all were significantly poorer when there was a positive history of IPV measured by the Conflict tactics scale^[144].

Berensen et al studied 59 girls under 18 attending for contraception and reports a correlation with exposure to all types of violence and risky behaviour. Stratifying the sample by non- witnessing or exposure, witnessing only, exposed but not witnessing violence to others and exposed and witnessing violence, a number of risky behaviours are described. They include tobacco and marijuana use, self injurious behaviour, using drugs and alcohol before sex, sex with multiple partners, and sex with strangers and first sexual intercourse before the age of 13. They also asked about a history of sexually transmitted disease, and whether the girls had considered or attempted suicide. The increase in risky behaviour and signs of emotional distress increase compellingly through the subsets, witnessing violence only increases some risky behaviours but witnessing and being exposed to violence has the most impact and the health of all the girls reporting violence should be a huge concern^[145].

UK data

One of the few British studies surveying 2,083 school children aged 9 to 11 measured their exposure to violence but doesn't differentiate between community violence, domestic violence and child abuse. Stewart et al report a positive association between violence exposure and needing to attend for dental care or medical attention. They also report behaviours likely to increase health problems in that the children with greater violence exposure also have an increase use of cigarettes and spent more money on alcohol^[146].

Poverty

As some of these studies have noted poverty has an influence on morbidity and mortality and this is true in developing and developed countries alike. Violence is more common in lower socio-economic groups ^[55] and the population of children in refuges may also be those whose mothers have the least financial resources. For all causes of morbidity, child abuse and neglect and chronic illness there is a gradient and poorer children fare worse. Therefore the group of children in refuge may have poverty as a cause for poorer health although there is not data to quantify risk.

4. Development

Surveys of health visitors in homeless hostels have indicated delay in speech and gross motor development ^[147]. An increase in delays in communication has also been noted in comparison between families in homeless hostels and housed controls ^[119]. A significant proportion of these families were homeless due to domestic violence. American studies have shown poorer cognitive, verbal and motor abilities than comparison with population norms. A twin study which does include British children shows a small but significant loss of IQ in children living with domestic abuse ^[61].

The survey in Cardiff refuges in 1999-2000 tested 73 children aged 3-4 years with the Denver developmental screen. 6 failed the screen and a further 7 had questionable results requiring review. This was not however a significant excess of developmental problems over and above the general population ^[90].

b. Poor access to preventive and therapeutic services

Primary prevention – immunization

In general, the refuge population, form part of a wider group of vulnerable families known to have lower immunisation rates. These include the homeless with whom this group overlap ^[116]. Immunisation rates are known to be lower in areas of social deprivation ^[148].

Studies on the immunisation rates for children in refuges are rare. The first mention of immunisation is in a study by Kerouac in 1986, a semi-structured questionnaire to others administered by 'middle aged experienced interviewers' in refuges for 'battered women'. The only comment on findings was that 'vaccinations were all taken care of by the mothers'. Her sample was 130 children from birth to 12.

The description does not indicate close attention to this subject in amongst their other data and the questionnaire is not available for scrutiny ^[149].

A small study in Canada compared 53 pre-school children in a refuge with 62 pre-schoolers of women who were not living with domestic violence and 15 children whose mothers were living in the community but in violent relationships. The violence, measured by the Conflict Tactics Scales was significantly higher in the refuge group than in the community group. Only the physical aggression part of this scale was administered. This assumes that it is just the physical violence in domestic abuse which influences child health, or that the amount of physical aggression directly correlates with that of other controlling behaviours which influence attendance for immunisation. There is no evidence for this. Both abuse sample groups were more likely to be 'under-immunised' than the control group. The refuge sample was significantly more under-immunised than the abused but very small community group^[10]. A systematic review published in 2006 concluded that inter-personal violence is 'likely associated with under –immunisation'. They only included studies with a contemporaneous comparison group and commented on the Canadian study described previously and the Cardiff study mentioned below commenting on the small sample sizes and the lack of adjustment for confounders in the Cardiff study. For the purposes of this study however our question is not precisely the same as that of the review which asks 'are children in homes in which IPV occurs less likely to receive routine health maintenance such as immunisations or well child visits'. They wish to factor out any confounders and are interested in the children living with domestic abuse in the community as well as those in refuge^[91]. This study seeks to establish and describe unmet health care needs in refuge children.

The same first author reports on a retrospective cohort study which was part of the Healthy Families Alaska Programme. This was an evaluation of a home visiting programme for high risk families identified using the Kempe Family Stress Checklist, which they describe as a validated tool for identification of vulnerable families. Data about IPV was collected from pregnant mothers on enrolment and the mothers were interviewed again at the child's second birthday. The Conflict tactics Scale was used and IPV was considered positive if 3 or more acts of violence between couples had occurred in the last year. At age 2 the children whose families were positive for IPV were significantly less likely to be immunised even after careful multivariate analysis^[150]. This high-risk group is a community sample rather than a refuge sample however it has been argued that a refuge sample is the severe end of Domestic Abuse by authors criticising data from refuge as not a good proxy for the population of children living with domestic abuse as a whole. If they are right then that might explain the findings of Attala et al in Canada and we might expect the children in refuge to be more significantly under immunised.

Cardiff data:

A study of 67 children in CWA refuges in 1994 compared immunisation rates with coverage predicted by the data available from the Cardiff Child Health System on which all immunisation and preschool surveillance data is held. Whole population data and also separately that from the least well immunised General Practice in Cardiff was used to predict rates for a cohort with the identical age distribution of the sample. The refuge sample was compared with the predicted data. The refuge sample was significantly under –immunised

relative to the whole population but even relative to the deprived General Practice area ^[1]. See Table 6.

In a later descriptive survey of 148 children in refuges in Cardiff, 30% of the 124 children who had data on the Child health System were not up to date with their immunisations ^[90]. This is similar to the situation in the earlier study. Even if it were assumed that all the children without data were up to date with their immunisations, which is highly improbable, these figures show that children in refuges are under-immunised and thus inadequately protected against preventable infections.

	Number (%) of sample immunised	District Estimate Number (%)	G.P. Estimate Number (%)	P value	95% Confidence Level
Diphtheria	51 (76.12)	63 (93.52)	61 (90.69)	0.000004 0.000346	44-58
Pertussis	44 (66.67)	56 (82.96)	53 (79.42)	0.000527 0.009321	36-51
M.M.R.	44 (65.67)	55 (81.78)	52 (77.15)	0.002153 0.029244	36-51

Table 6 Immunisation rates for children in Cardiff refuges ^[1]

In terms of the health service needs of children in Cardiff refuges it is likely that their poor immunisation rates are a result of a number of factors acting together and domestic abuse and the homelessness that ensues is an important part of this. However the immunisation rates are such that consideration must be made of strategies to improve the protection of these children. A child in a CWA refuge is more likely to be under-immunised in comparison to the immunisation rate for the total child population in the city of Cardiff. The rate falls short of required national targets.

Secondary prevention –Surveillance

Studies based in the UK of the uptake of health surveillance for the pre-school child are few. In the USA some studies look at whether children have attended for ‘well-child’ appointments or whether they have regular provider of this care or a regular venue. Some comment on whether families have medical insurance in order to pay for this. Bair-Merritt’s systematic review was not able to find evidence to show whether the presence of domestic abuse impacts on the likelihood of children receiving their programme of surveillance provided in the country of origin. In fact they do describe 2 studies in the USA which indicate that possibly there is no effect or any effect is to delay visits ^[91]. In the later study of the at risk families in Alaska although initial analysis indicated that children of families with IPV were less likely to have had 5 well-child visits in the first year this was not significant in the multi-variate analysis ^[150].

The first Cardiff refuge study in 1995 showed that the 53 children in the sample had significantly lower surveillance rates recorded than an identically aged cohort calculated from the Cardiff coverage data on the Child health System^[1].

Examination	Number (%) observed	Number (%) predicted	P value	95% Confidence intervals
6/52 check	26 (49.06)	39 (73.71)	0.000129	19-33
8/52 check	22 (41.51)	38 (72.60)	0.000002	15-29
Hearing test	28 (52.83)	46 (85.96)	0.00000001	21-35
18/12 check	35 (66.04)	42 (79.82)	0.016468	28-42
3yr check	20 (37.74)	29 (55.24)	0.012424	13-27

Table 7 Surveillance data for Cardiff refugees 1995

A larger study of 148 children performed in 1999 provides more detail about the coverage and these results are laid out in the table below. The preschool and school age modules of the child health system were not added until 1988 and 1991 respectively, so the totals

reflect those children who should have had each assessment by the time of the survey and whose age meant that they should have had a record of that assessment on the child health system. The percentage of children who had no data recorded on the child health system or were not registered on the system varied between 38% and 57% for these assessments.

Other published studies do not show that children living with domestic violence in community samples, albeit at risk samples in some cases, fail to attend for the planned programme of well-child surveillance appointments significantly more than children who are not living with domestic violence, although their attendance may be delayed. The analyses in these studies are devised however to measure specifically the impact of domestic violence. For our refuge population there will be other factors, which also influence their health and health care. The health service response required is that which will meet the needs of these children whatever the origins of their difficulties and respond to the disadvantage in total. There is evidence that the Cardiff population of children in refuge were faring less well than the whole population of Cardiff in receiving the programme of surveillance. The above table also shows the importance of these opportunities to pick up problems and refer appropriately. These appointments are also increasingly a focus for health promotion advice, which will also be missed if there is non- attendance. These studies in Cardiff took place before the introduction of the Health Visiting team for the homeless, which provides a service for the refugees currently.

Table 8 Outcome of child health surveillance as recorded on child health system in all 148 children in study. Values are numbers (percentages) of children

Outcome	Birth	6-8 weeks	8 months	Hearing 7-11 months	18 months	3 years	4 years	School entry
Health satisfactory	54(42)	73(56)	49 (41)	55 (44)	48 (46)	26(31)	20(30)	17(23)
Child to be observed or referred	2 (1)	4 (3)	11 (9)	14 (11)	17 (16)	15(18)	10(15)	20(27)
Child registered on system but data not recorded	54(42)	33(25)	41 (34)	36 (29)	22 (21)	24(29)	22(33)	19(26)
Child not registered on child health system	20(15)	20(15)	19 (16)	20 (16)	18 (17)	18(22)	15(22)	18(24)
Total	130	130	120	125	105	83	67	74

Taken from Brooks RM, Ferguson T, Webb E Health services to children resident in domestic violence shelters 1999. ^[1, 151]

Tertiary prevention - Difficulties accessing health care

The initial literature review discussed why women who are living with or fleeing domestic abuse may find accessing health care difficult. A few studies have attempted to measure this. Bair-Merritt et al in their systematic review asked the question 'Do patterns of illness-related visits differ between children in homes with IPV and those without IPV'? They failed to find evidence to report on^[91]. The retrospective cohort study in the Healthy Families Alaska programme showed an increase in self reported medical neglect from mothers living with IPV. They asked the question 'How many times (this year) were you not able to make sure your infant got to the doctor or hospital when he or she needed it?' The increase however was not significant after statistical analysis ^[150]. It might be that an infant would be less likely than an older child to be neglected in this way as they are perceived as more vulnerable and asking the question about older children might be useful. This also depends

on the mother appreciating the need for medical care and then failing to access this and doesn't investigate whether mother's perception of their child's need for care is impeded by the impact of domestic abuse.

Onyskiw reports from the National Longitudinal Survey of Children and Youth in Canada, this survey does not collect and allow data for child abuse to be factored into analyses. However child 'witnesses of IPV' had no difference in the number of medical contacts than the non witnesses. They did however have fewer contacts with paediatricians and more with other doctors, public health nurses, child welfare workers, and other therapists. The author postulates that the other doctors were at walk in medical clinics or emergency departments. This may either reflect a wish to avoid a doctor getting to know a family and suspect abuse or because these families cope best with settings which provide instant access without any prior planning. Unfortunately these strategies disrupt continuity of care for children^[112].

The only discussion regarding receipt of appointments for this population is within the published studies from Cardiff. Appointments are sent out by post for the pre-school programme of immunisation and surveillance, and require that the child is registered on the Child Health System (CHS) and that the information is accurate and up to date for that child. In the initial study in 1995/6 14 out of 71 (18%) children were not on the Child Health System and would therefore not have appointments generated. In 1999 the figure was 24 out of 148 (16%). A significant proportion of the children would therefore miss out on invitations for immunisation or surveillance appointments for this reason. In addition to this a further interrogation of the details on the CHS supplemented by interview data from mothers showed that the situation to be more complex. For the 124 with data on the CHS 33 had the wrong last address recorded or no address and 80 had the wrong GP or no GP recorded. Of those with a last correct address recorded 48 said they would not receive any letters sent to that address because their safety depended on not divulging their whereabouts. Therefore 83 of the 124 would not receive appointments by post and no appointments would be generated for the 24 with no details on the CHS. Without an intervention to address this only 28% of children in refuge would be served well by the appointment system for the pre-school programme^[90].

There is no data regarding the influence of incorrect addresses in the secondary care setting influencing provision of services to this group. It must be likely that for this group of children the addresses held in other parts of the health service would be inaccurate and if they were accurate for the last address we know that for a substantial number the letter would never reach the mother. Whether mothers ring and update the details we do not know.

There is evidence that children arrive at refuge with a range of unmet health needs. In the later Cardiff study, of 148 children surveyed, 73 referrals were made for 65 children: 36 children were referred to a health visitor; 9 to a paediatrician; 8 to social services; 6 to school nursing; 4 to a family therapy; 3 each to child protection, audiology, and enuresis services; and 1 to dietetics^[90].

Summary of findings relating to health needs from literature by subcategory

Table 9

Definition of population	Children under 16 residing in a Women's refuge in Cardiff	Approx 127 children per year ^[4]
Subcategories		
Increased morbidity	Mental health and Emotional well-being	<ul style="list-style-type: none"> • UK baseline 10-25% mental health disorder ^[128-130] • Domestic abuse increases risk factors for mental health disorder (see table ?) • Increased emotional and behavioural difficulties, and more for witnessing violence than verbal abuse ^[63] • 63% of child witnesses 'fare more poorly than the average child' ^[62] • 49% of children in Cardiff refuges Rutter score above the cut off for requiring further psychological assessment^[90] (See table ?4)
	Safeguarding	<ul style="list-style-type: none"> • Developed countries all children maltreatment rates 9% ^[42] • 30-60% overlap with physical abuse ^[80] • Increased risk of maltreatment in families where there is domestic abuse ^[79, 81-86] • Increased probability of finding domestic abuse in cases of maltreatment presenting to child protection services for assessment ^[87].

	Physical health	<ul style="list-style-type: none"> • No high level evidence available ^[91] • Surveys report maternal perception of poorer health ^[142-144, 146] • One of a group of adverse childhood experiences leading to poorer health outcomes ^[141] • Cross-sectional studies report associations between specific health issues and domestic abuse ^[136, 138-140, 145, 152]
	Development	<ul style="list-style-type: none"> • Some evidence of poorer cognitive, speech and motor ability ^[67, 119, 147, 153] • Local study failed to show increase above the population norms at age 3-4 ^[90]
Poor access to preventive and therapeutic services	Primary prevention	<ul style="list-style-type: none"> • “Likely to be associated with under-immunisation” ^[10, 91, 116, 148, 150] • Local data shows under-immunisation^[1]
	Secondary prevention	<ul style="list-style-type: none"> • No difference shown in the very few studies ^[91, 150] • Local data suggests poorer surveillance coverage ^[151]
	Tertiary prevention	<ul style="list-style-type: none"> • No clear evidence of difference ^[91] • Local data reveals 28% children in refuge with correct address on CHS ^[90] • Local data suggests unmet health needs

Comparative data – service models retrieved from literature search

Literature searches provided a small number of studies for consideration (see Table7) fewer still were those providing data relating to efficacy and cost effectiveness. Most are descriptive, some are USA base and a few are from the UK and therefore within the NHS. Vostanis makes a valuable point however in his team's presentation of a service to families in homeless hostels, 50% of which were homeless due to Domestic Violence. He attests that two aspects of service can influence cost effectiveness positively:

- assessment and consultation which results in appropriate referral
- support to access services that are identified as necessary ^[154].

There is a distinction to be drawn between descriptions of therapeutic interventions and evaluations of their effectiveness in population of children affected by domestic abuse and the service model underpinning provision of interventions. Some papers allude to both, neither in great detail. There is a large body of literature describing different psychological theories and interventions for children to remedy effects on the mental health of children who have been or are living with domestic violence. They may or may not be based in a refuge; they may or may not include work with mothers as well as children. Reviewing precisely which type of psychological intervention is best is beyond the scope of this paper. One clear message from all the literature relating to child maltreatment of any kind is the variability of the impact on children due to factors relating to the child, family, community and the complex mix of disadvantage many of these children experience ^[62, 63, 155]. The service to mothers in order to help them recover and develop as parents is also essential ^[100]. Therefore it would seem that a one size fits all psychological intervention may not be appropriate and that the key is assessment of need and a range of services to meet a specific child and family's needs.

Service models in peer reviewed journals vary in:

1. How and when contact with families is made
2. Approaches to training of health professionals
3. Make up of multi-agency or multi-sectoral alliances underpinning the service delivery

Table 10 Studies retrieved relating to services for children in refuge

First Author Or Source	Area and Country	Training of health worker	Service provided	Multi-professional/ agency liaison	Costs	Evidence Of Outcomes?
D'Amico [113]	Colorado USA	'Degree level Nurse'	Free Onsite Clinics For mother and child and health promotion 2hrs/week Motivational interviewing approach	Collaboration But formal structure not described	Not stated	N=15 Children=3 Some Positive Outcomes No comparison Data.
Drotor [156]	Ohio USA	'Mental health professional'	Mental Health Promotion Home visits	Referral by Police Collaboration and referrals on for further support	\$2,200 Per family	
Reilly/ Graham-Jones [157, 158]	Liverpool UK	RGN and RMN	Health advocacy	Collaboration and interagency work	Cost Neutral	QOL improved Decreased Primary Care Workload
Vostanis /Tischler [119, 135, 154]	Birmingham Leicester UK	Nursery nurse (previous study mental health Worker)	Identification Health and social needs Liaison with specialist services Parent training and support	Local Weekly Multiagency meetings	Not stated	Qualitative 'Positive difference' for the majority

Contact with families

Drotor describes early referral made by police to child mental health services at incidents of violence to which they are called, 87% of these being domestic violence. They provide written and verbal explanations of the risks to children at the incident and this is followed up by a telephone call from a mental health professional to arrange a visit. They report on 1,739 children referred, 64% of whom then received one or more visit to work on decreasing the psychological impact on the child and provide 'support, education and safety planning for the family'. Unfortunately no outcomes data is available but a costing of \$2,200 per family is quoted.

Drotors study is not directly relevant to the refuge situation that is being explored in the study. It is a reminder however that mental health issues, which have emerged as a strong theme in this review are a concern for children living with domestic violence before they ever reach refuge and early intervention might be effective. It also illustrates a philosophical difference in the approach of mental health services, which traditionally in Cardiff are reactionary rather than pro-active. It also describes mental health services working with families who are often still in crisis or at least ongoing instability^[156].

Reilly, in a UK study based in Liverpool studies the use of a Family Health Worker (FHW) to advocate for homeless families 63% of whom came from refuges. They compared an allocation to a FHW once families had registered with one local GP practice to arrange an appointment, families who were approached directly on admission to hostel or refuge and a control group who just received normal primary care services^[157].

One focus of the study was to decrease the workload this needy group presented to primary care and allowing for confounding variables they showed that a direct approach by a health advocate was a cost - neutral way of reducing primary care workload. A second focus of this study was quality of life (QOL) measures for their clients. Measures of QOL were significantly higher for the directly approached group but the authors admit that the usual high attrition rates for a study of this kind were a limitation.

Other studies describe models where health workers visit the refuges to make contact and offer services^[113, 119].

Professional training of health worker

There are a variety of workers described in these studies as providing first line contact and or coordination of health care and other support needs. Reilly's FHW/health advocate was a registered general nurse and registered mental nurse but not paediatric trained and therefore might be more expert in issues for the adults in the families^[157]. D'Amico and Nelsons 'nurse care manager' is described as a degree level nurse 'competent in providing nursing care management to women and children^[113]'. Vostanis/Tischlers Family Support Worker had nursery nurse training and experience of parenting and child protection work^[119, 154]. This second exploration of a model for services to the homeless by this research team changed from using a mental health worker in an earlier study. They found that a worker just trained and focused on child mental health was too narrowly targeted and unable to meet these families' needs.

All of these health workers perform assessment of need for a child and family and at very least work to support these being met. Some provide direct interventions in refuge from parenting to direct clinical care such as immunisations etc.

The level of training of the health worker is relevant to the services they can provide but also will influence the costs of the service. All the health workers described began by making a holistic assessment of child and family needs.

Multi-agency liaison

All of these models depend for their success upon multi-agency liaison and embrace the evidence from many quarters that a holistic package of services is required for these families to ensure their 'health' in its broadest sense. Exactly how this works practically is not necessarily illustrated in their write up of their outcomes. Geographical positioning of the service is explored by Reilly and seems to show direct contact, within the refuge or hostel may benefit efficacy of primary care usage and improve QOL. Vostanis' team describes a weekly meeting between their FSW and staff in the hostel to review packages of care. D'Amico however describes providing clinical care within the shelter, this very small study showing some improved outcomes but working with a very different system of health provision than the UK.

Differences in local populations should be allowed for throughout this process for its conclusions to be valid. However as the results show there was not enough detail retrieved to require this level of analysis.

Identifying service models through professional networks

Table 11

Source and location	Training of health worker	Service provided	Multi-professional/agency liaison	Evidence of outcome
DV Forum Perth and Kinross UK	DN/HV and SHN for refuge	Health promotion Direct nursing Signposting and support to access services	Co-located and part of team for Vulnerable groups. Homeless, substance misuse, LAC etc. Collaboration with MA DV teams	Pilot 13 years ago Substantive service in place following outcomes of pilot.
DV Forum Fife UK	DV nurses	Health assessment of women and children	Regular meeting with refuge staff Provision of mental health training for refuge staff.	
BACCH Solihull UK	psych- ologist	1-1 therapy for under 5s weekly as long as significant period of separation from perpetrator and stable.	'Solihull approach' – training for HV to provide parenting and mental health input. Referral for psychology after this has been used.	
Stakeholder interviews Ceredigion UK	Tier 2 CAMHS	Advice, joint assessment training, resource library Links to other services Supported referrals to tier 3 CAMHS and adult mental health. Specific to mental health issues	As necessary per case.	None.

Each search/request provided one or two results at most. For each result information was followed up by viewing any information available on the internet to ascertain how relevant the examples were. If it was possible this followed up with a telephone contact with a key team member. The most interesting examples were in Scotland and it was not possible to visit these within the resources of this study. The Tier 2 worker in CAMHS in Ceredigion agreed to be visited and interviewed.

Examples included

- A specific psychology service for children who are in refuge
- Nursing services within refuge
- Tier 2 CAMHS service with a close relationship with refuge workers.

None of these interventions provided any information on cost.

In Scotland there were examples of nursing input into refuges. These included Health Visitors, School health Nurses and Community Nurses. They provided health assessment, multi-agency liaison, and support and access to other health services. Within Perth and Kinross this began as a pilot 13 years ago trialing services to vulnerable people as a whole and after 3 years the service was made permanent. The Central Health Care workers are based together so that close working is possible for families whose problems may include a need for a number of their services. These include the homeless, drug and alcohol abuse etc. A service level agreement supports their interface with CAMHS. A recent inspection report is very positive about the benefits of this service, which sits within a wider partnership strategy for vulnerable groups.

In Fife the service is again nurse based and for women and children. This service have recognised the need for training in mental health for refuge workers and addressed this.

In Solihull they use the 'Solihull approach' working with children under 5 who have emotional and behavioural issues and health visitors are trained to use this approach. This is an 'integrated model of working with open learning packs and a training programme for care professionals working with families, babies children and young people affected by emotional and behavioural problems'^[159]. If the health visitor has already used this approach and problems continue and the family is stable with a clear safety plan and the perpetrator having left (or having been left behind) for a significant period of time children can be referred. The service led by a chartered psychologist provides 1-1 therapy weekly for up to 5 months. This is an example of a therapeutic option available when family life is stable provided by a health service. What are not included here are the mental health interventions, which are more commonly available in an ad hoc manner by Non Governmental organisations (NGOs). NGOs have traditionally run programmes to aid the mental health and well being of women and children living with or recovering from Domestic abuse.

A CAMHS approach in a different area of Wales was reported during a stakeholder interview. The Tier 2 mental health worker was visited and interviewed. In this area Tier 2 CAMHS provided 5 days a week telephone consultation for children's workers in refuge (amongst others). Joint assessments were undertaken for some children in refuge within the limits of their role allowing only 20% of their time to be direct work with children and families. Each child could only have a maximum of 4 sessions of time for direct work. Provision of assessment was with consent of the mother and another health professional but would be sought actively by the CAMHS worker if consultation with the children's workers resulted in evidence that this was necessary. Links into specialist CAMHS or adult mental health services for mother were eased and supported when appropriate.

Comprehensive information is held and shared about other services that might meet a child's mental health needs. A resource library lends out books games and activities to use with children which refuge workers can borrow.

Effectiveness of current services and roles of health professionals working with the refuge population

This part of the search revealed very little specific to children in refuge or children living in the community with domestic abuse. Where this was the case evidence is included relating to disadvantaged groups in general, if that was available.

See table 12 below.

Service or role	Evidence of effectiveness
Immunisation and surveillance	<p>Preschool programme is regularly reviewed and updated</p> <p>Immunisation rates for vulnerable groups need addressing</p> <p>Record transfer is important</p> <p>Home visiting to increase immunisations are cost effective</p> <p>Ensuring MMR coverage is cost effective ^[52, 160]</p>
Targeted health visiting	<p>No strong evidence ^[113]</p> <p>NICE evidence suggests effectiveness targeting immunisation coverage ^[160]</p> <p>Good outcomes for home visiting to reduce child abuse : Cost – effectiveness may be promoted by professional visitors, targeted high risk populations and a comprehensive approach designed for the specific population ^[16]</p>
School health nurse	<p>Little evidence for generic school nurse except in one or two condition specific areas</p> <p>School nurse are valued ^[161, 162]</p> <p>Safeguarding and promoting mental health are part of the WAG vision for SHNs ^[163]</p> <p>No studies relating to school nurses working into refuges</p>
Access to primary care or specialist services	<p>No data measuring access or measures to increase access</p> <p>Disadvantaged families may use emergency and walk-in care rather than planned care settings ^[112, 115]</p>
Primary Mental Health Worker (PMHW)	<p>Little evidence yet for effectiveness of PMHW in CAMHS yet</p> <p>One study found increased referral to specialist CAMHS but another found increased appropriateness of and attendance at appointments ^[164-170]</p> <p>Small studies of user views of other disadvantaged children indicate ambivalence to professionals and to talking with non verbal communication being helpful ^[171]</p>

Review of National and Local Guidance

Sources of guidance were interrogated for the answers to the following questions.

1. What specific health services should be available to children and families in refuge?
2. What standards are set for those services?

The Welsh National Service Framework for Children, Young People and Maternity Services states that all should have 'equitable access to appropriate high quality services irrespective of....their social circumstances.' This includes a local GP, the All Wales Core Child Health Surveillance Programme, a dentist, universal and targeted health promotion information and advice. Early warning signs of mental health problems and disorders should be picked up by health staff and appropriate referrals made. Parenting support should be available, 'a range of universal and targeted services to meet assessed need' with 'particular services for families who find themselves in difficult circumstances'. A 4 tier CAMHS should be available with Tier 1 practitioners 'identifying risk factors, taking opportunities to reduce their impact and taking steps to promote resilience of vulnerable children, young people and their families'. They should work in coordinated partnership with other services to do this. They should have 'direct access to professional at tier 2 for consultation, training and joint work'. There should be a protocol describing how Tier 2 works with Tier 1, routine consultation within 4 weeks and in emergency within 3 working days.

As far as quality is concerned it states staff should be 'trained and supported to identify and manage domestic violence following WAG guidance' and able to 'identify early warning signs of mental health problems and disorders' and 'make appropriate referrals'.

Children who miss immunisations should be followed up within a year and again at school entry. GP practices should monitor and provide support for those with the lowest uptake 'particularly for the MMR'.

Children in special circumstances (which include those living with and also fleeing domestic abuse) should be monitored to measure uptake of provision and those measures used to alter service planning if necessary^[12].

Domestic Violence: a Resource Manual for Health Care professionals^[172] produced by the then National Assembly Government does not mention specifically services that should be available but comments on the training of staff to be confident and competent in talking to patients about domestic abuse and able to respond to disclosures. It makes it clear all staff should receive training as part of the safeguarding training programme.

National Service standards for Domestic and Sexual Violence produced by the Women's Aid Federation of England (WAFE) again does not specify health services but subscribes to the accepted view that children in refuge require services alongside their mother to address the

disadvantages they have been under living with domestic abuse^[173]. 'Services recognise that the most effective means of protecting children is to support the non-abusive parent and to provide or facilitate access to parallel support for children's mothers so that the broader range of children's needs in relation to schooling, health and parental understanding are recognised'.

A Vision for Services for Children and Young People affected by Domestic Violence discusses ensuring the 5 key outcomes from 'Every Child Matters'^[174]. Under the outcome 'be healthy' they describe a tiered service model moving from universal services including routine screening for domestic abuse through vulnerable children living with domestic abuse supported by a health visitor, complex problems requiring CAMHS support to their final category requiring restorative work. It can be argued however that health services have a part to play in all of the five outcomes; be healthy, staying safe, enjoy and achieve, make a positive contribution and achieve economic well-being.

Following a mapping study of domestic violence provision Humphreys et al have laid out good practice indicators to allow benchmarking^[175]. They include a philosophy and ways of thinking as well as practical issues. All of these can be relevant to health services and are useful to consider.

1. Use of definitions of Domestic Violence

Health Board policies and training should consider which definitions to use and promote an understanding of Domestic violence which ensures they are competent to identify it in all its forms and throughout our clientele.

2. Policies and Guidelines

The Health Board should have policies and guidelines for practice. These should include confidentiality and safety. They should include children in need and children in need of protection.

3. Safety planning

This includes keeping women physically safe whilst receiving health services and keeping information confidential that might put her or her children at risk.

4. Training

Quality of training, a rolling programme and reaching the large numbers of staff requiring this training are laid out.

5. Evaluation

Health services should be evaluated, independently where possible including 'building in the voices of survivors'.

6. Multi-agency co-ordination

Co-ordination and integration, which is not just a 'talking shop' but produces outcomes, which can be agreed and evaluated.

7. Good practice with women and children

Indicators of standards when working directly. Skills in asking difficult questions, attitudes and knowledge base to support these families.

There are minimum standards for all services provided for children in terms of safeguarding^[73]. These must be adhered to and data collected to ensure that these are built into any service provided. These are set out clearly in Working Together to Safeguard Children and the All Wales Child Protection procedures. The RCPCH Child Protection Companion revision due out later in 2012 contains an expanded section on Domestic Violence for paediatricians. In an editorial in the Archives of Disease in Childhood Hall and Williams discuss Safeguarding as a concept that is wider than Child Protection. They make the link with children living with Domestic Violence among other vulnerable groups as at risk of physical and mental health problems. Thus safeguarding children extends to all consultations where a social history and the skills to manage the information revealed and a wider understanding of promoting children's mental health are required^[176].

Summary of Comparative Evidence

Health Services for children in refuge over and above universal services are sporadic and variable and depend on local enthusiasm and vision. They can be divided into 3 main agenda, which drive and underpin their efforts.

1. Addressing the mental health impact of community violence

This is a more pressing focus in the USA where Domestic Violence is seen and addressed as part of this continuum

2. Addressing the mental health impact of Domestic Abuse in children

This may be stand-alone for Domestic Abuse or as part of a service for homeless families. This can be by direct work into a refuge or using the Tiered CAMHS model, which supports the Tier 1 work of Children Workers in refuge.

3. Addressing the physical and mental health needs for children in refuge.

This may be stand alone, part of a service for the homeless or part of a wider service for vulnerable groups addressing health inequalities.

The constant factor in all services, whatever the training of the health worker who makes first contact, is that their assessment is holistic addressing the family's issues not just focusing on the index child.

Virtually every service addresses access to more specialist services by advocacy and support. Some services take more specialist care into the refuge.

Evidence for effectiveness is sparse. There are some QOL measures and client satisfaction evidence that suggests that services are well received and make a difference. A pilot in Scotland has been evaluated and made into a substantive service with anecdotal evidence of an excellent recent inspection report. There is no outcome data relating to specific health issues in the public domain. Specific parenting or therapy approaches for emotional and behavioural problems in children are not included here but the choice of these for any mental health improvement whether supported and advised by health staff or directly implemented by health staff will impact on efficacy.

Evidence of cost effectiveness is rarely available. There is a little evidence that health advocacy is cost neutral in that it decreases primary care workload.

Safeguarding guidance in the context of Domestic Abuse is clear and based on a developing understanding of the cross over between this and child abuse. It has been the subject of several national reviews and is monitored by the Local safeguarding Board. The levels of training proscribed and the guidance for multi-agency working should be intrinsic to any health service in refuge and all staff who might meet children and families in any health setting.

Domestic Violence good practice is more recent and based on multi agency reviews and the body of literature referring to all services working in this area. Health services are included however in recommendations. Reviewing these alongside the safeguarding guidance there is a clear parallel here and they mirror good practice in safeguarding.

The efforts to find services against which Cardiff services could be benchmarked has not been rewarding in terms of volume. In addition to a sparse response to the searches there was little to learn from the requests to key practitioners working in this area. This reflects how new an understanding of the needs of these children is and how far clinical services and evidence of efficacy of interventions and services lag behind research evidence of need.

Evidence from the Corporate approach

This relatively small piece of qualitative data collection is an addition to 2 other approaches performed by a single researcher and the evidence from the quantitative element was well known to the researcher. Any analysis of this data can therefore only be described as a content analysis as this can be theory driven.

Interviews with professionals

The interviews however provided very similar views from each participant from their perspective. These can be described under these themes:

- the priority for children's health,
- factors that promote children's health and
- barriers to accessing services to meet health needs.
- Description of current services

Priorities

Every interviewee was clear that children's emotional needs were the priority. They were aware of the risks to physical health and development and these were an important part of the assessment that the health visitor and the refuge staff undertake. They felt strategies to address this were more firmly in place although some suggestions for improvement were made. These are discussed below.

The PMHW understood the risk that domestic abuse was to children's mental health and had come across children living with domestic abuse from school referrals.

Refuge staff felt experienced in coping with the trauma of fleeing domestic abuse and undertake a very careful documentation process of the stressors that children have and are coping with. They report concerns about PTSD, anxiety, bed-wetting, regression of behaviour, nightmares, sleeping difficulties, challenging behaviour, re-enactment of abuse, depression, and inappropriate peer relationships. For a few children there are concerns about neuro-developmental disorders. They realise that the abuse does not necessarily stop for mother because of coming to refuge. They report that it is a time of turmoil for women.

All children have a programme of activities in refuge. For children who need more support CWA offer more in house programmes than ever, Triple P^[177] and Incredible Years^[178] for example. They also provide signposting for families to other programmes. However they feel that some children need more or are different and they need CAMHS expertise at that point.

The HV meets families where she can offer advice, signpost to other services or use a play specialist to help. She too meets children where she feels CAMHS expertise is needed. This was echoed by the interviewee from education. From a paediatric perspective it was felt that referrals not taken by CAMHS or an anticipation of this meant children were referred to paediatrics. This was particularly true for younger children. All non CAMHS interviewees reported seeing children regularly where they felt they were lacking the knowledge to help and were looking to CAMHS to help.

All interviewees recognised that children need a package of support that includes services for mothers. This should include health services.

Factors that promote children's health

Factors to promote children's health included targeted health visiting with smaller caseload. The refuge valued their close relationship with the health visitor. The refuge has good relationships with some local GPs. Once overdue immunisations or other appointments are identified and because families are registered locally they can be provided. Where necessary and if possible refuge staff will accompany mothers to appointments to provide support.

The 24 hour observation of children's behaviour in refuge is seen as a valuable in gathering information to help a child and family. The expertise of the refuge workers with this group of children is also a positive factor.

The Paris health information system makes transfer of records across the health board easier.

There was an awareness of the PMHW role and a feeling that this would be helpful.

Barriers to health care

Barriers begin with the domestic abuse and the fact that the health needs have been hampered by denial of access by the abuser or other priorities overwhelming the family. The families are still in crisis in the refuge and with other issues to sort out it may be the '*last thing on their minds*'.

One bad experience with a professional like a doctor can put women off seeking help from others. There had been experience of using new GP surgeries for women in refuge and the discourtesy and unhelpfulness of receptionists being off putting for women. This 'bad experience' was an issue for the PMHW who felt a specialist CAMHS clinic appointment, with the need to answer a lot of questions and possibly unearth elements of guilt for mothers and young people if timed wrongly might put that family off specialist CAMHS when they might have a useful role at another time.

That generic services do not have an understanding of their '*specific and different needs*' was raised as a concern. The expertise of a dedicated health visitor for example was seen as

an advantage. This was contrasted with the numbers of school nurses that might need to be liaised with none of whom had particular experience and knowledge of domestic abuse.

The health visitors remit for under- 5s means that older children have a poorer service. Interviewees explored the role of the SHN. They are a group that is the first point of access to health care advice for education staff. They do have stronger links with the PMHW than refuge do.

The mobility of these families was a common concern. This challenges continuity of care. Ensuring information follows the family when they move is difficult although Paris helps. The CAMHS network cannot access Paris however.

There is concern about timeliness of services. This is influenced by mobility and the crisis that these families are in. Because of their mobility and the option of support to access appointments it is felt preferable to be able to access first appointments whilst children are in refuge. However waiting lists do not always allow for this. When a family moves the geographically organised services try to pass them onto the team for that area. This not only adds to waiting times but also can affect continuity of care.

CAMHS concern about timeliness of appointments is because of a wish not to provide an appointment at a time when it may not go well, the young person doesn't want to talk, the family has too much else to deal with.

Although all interviewees stressed their understanding of how stretched CAMHS were for resources they expressed confusion about what that service was offering and how to access this. One description was '*a cloud of mysteries*'. The referral criteria felt inconsistent and there was not sufficient feedback when referrals were rejected to help them work this out. There was optimism from some that the PMHW role might help with this and the PMHW certainly felt that that was part of their role.

Current services available

These descriptions are valuable because the current situation for providing health care services should be defined as part of this assessment ^[13]. This can then be measured up against both the evidence base for, and felt needs for health care services. Set against the evidence it can be evaluated to ascertain whether a change to this model is needed to match health service needs to service provision more closely. Stakeholders will need to understand why changes are needed to current provision in order for them to be acceptable.

The health and well-being of children who enter refuges is not just addressed by health board provided services. It is a broader multi-agency responsibility and is taken on by other statutory agencies and well as NGOs.

The Children and Young person's team offer mother and children who enter Cardiff Women's Aid refuges an assessment if they want to access their services. The majority do. The assessment (appendix No.2) includes a wide range of data about health service use,

experience of Domestic Abuse and health issues in order to classify the level of support needs. From this a support package is put together in consultation with mothers. This may include in house programmes for mothers and/or children and young people, signposting to other services, and taking action on child protection issues. Progress is charted and reviewed at pre-set intervals. Workers are trained to deliver the Triple P ^[177] and Incredible Years ^[178] parenting programmes. Counselling is now offered to children and young people.

Health visiting and Primary care

Notification to a designated Health Visitor for the refugees is made for under '5's. This is reported to be a robust system as long as the Health Visitor introduces herself to any new staff. She then visits the family and provides health visiting services. She uses the Paris (Primary Access Regional Information Sharing) system to look at any old records for the children and input information which any other C&V HB Community Child Health professional can view. She liaises with the Health Visitor onto whose caseload the family moves after refuge. This is done by telephone and if they move within the HB area information on Paris is available.

Both refuge staff and the Health Visitor encourage and support mothers to register with local GPs and Dentists and use their services to deal with outstanding health issues.

The Health Visitor, GPs and the refuge staff refer to Specialist CAMHS directly when they feel emotional and behavioural issues might indicate a developmental disorder or mental health issues beyond those that they are familiar within their clientele.

CAMHS

There are two Primary Mental Health Specialists, one covering the east and one the west of Cardiff. Their role is to support a wide range of professionals from statutory services and NGOs who work with children to fulfill their work at Tier 1 of CAMHS. Consultation is offered by where Tier 1 workers are based, it may be in fact that the child or young person lives outside the area but attends a school in the west and those professionals can link with the west Primary Mental Health Specialist. They have a training, liaison, consultation and occasionally joint assessment role with Tier 1.

Referrals to Specialist CAMHS (Tier3) are reviewed at a weekly referrals meeting and if they are accepted they are then allocated to the most appropriate team member. Referral can be accepted from GPs, Social Workers, Educational Psychologists, Paediatricians, Health Visitors and Voluntary agencies. Their service information states that all referrals should be seen by 14 weeks.

Community paediatrics and Therapies

The Health Visitor or GP might also refer to paediatrics or children's therapies where appropriate. Referrals of children in refuge are handled by standard procedures and in standard timescales for any referral to that specific service. For Paediatrics the maximum acceptable wait time for an appointment before a breach is logged is 12 weeks.

Summary

This group of children is served by universal services except for the dedicated Health Visitor. There is a team of health visitors for the homeless and the dedicated health visitor for the refuges is also the team leader and has a wider role for homeless hostels. The provision of a dedicated Health Visitor was the result of a descriptive study of the health of children in refuge by a team of researchers including the author published in 2001^[90]. Refuge staff will where necessary and possible accompany families to appointments to support them in accessing health care.

Information Sharing

Community Child Health staff have access to Paris at their bases if they have suitable connections and hardware. This allows Community Paediatricians, HVs, School Nurses and Children's Therapies to share information. Paris allows the author of a case note to choose to draw attention to these for relevant other users by a notification system. CAMHS is part of the South East Wales Network hosted by Cwm Taf Health Board. They have separate records and no access to Paris for C&VUHB.

All health board staff throughout Wales are part of a single secure email system and can use this to send patient data. Although health board staff can email other statutory and NGOs they cannot discuss any identifiable patient information in these emails as this is not deemed to be secure. Information is shared by telephone, fax or by post.

Training

Training about domestic abuse and its impact on children for C&VUHB is provided as one of the level 3 training days which is part of the programme provided by the Safeguarding Training Subgroup of the Safeguarding Steering Group. Practitioners who are involved with children and families are required to attend mandatory level 2 training on safeguarding children. Domestic abuse is flagged up in this training as a cause for practitioners to question the safety of children and discuss with a senior colleague. If then in their role they identify a need to learn more about domestic abuse they can attend a level 3 course specifically addressing domestic abuse instead of refreshing at level 2 which should be done within 3 years. There are also multi-agency domestic abuse awareness courses run by NGOs information about which is circulated to HB staff.

More recently there has been an initiative to combine Domestic Violence Safeguarding Children training with Vulnerable Adult training due to the overlap and to allow staff to be released for less time. This whole days training is being piloted at present.

Monitoring and evaluation of training is the role of the Training Subgroup of the Health Board Safeguarding Steering Group. A training needs analysis (TNA) should provide

information about which staff need training at the different levels and this can be matched with training attendance data to report on the success or otherwise of the training programme to reach appropriate staff. Unfortunately the TNA for a complex organisation such as the Health Board has proved difficult to achieve due to staffing and IT issues. It is as yet inaccurate and managers find it difficult to interpret. The training subgroup continues to raise this issue with the Organisational Development and Training department (ODT) of the Health Board and report to the steering group. Only raw numbers of staff can be provided at present. Training information should be available to pass to managers so that any deficiencies can be discussed and addressed as part of appraisal or performance review processes for staff and C&VHB staff training is now linked with their electronic staff record (ESR). Although data is improving at present there is not the resource or system to ensure all Health Board staff that need it have had safeguarding training and Domestic violence training to a level appropriate to their work.

As CAMHS staff work for the South East Wales CAMHS network, which is hosted by Cwm Taf Health Board, they do not fall under the mandatory programme for C&VUHB but that of Cwm Taf Health Board. At present this does not allow the C&VUHB Safeguarding Training Subgroup to include them in their training needs analysis and report their attendance at Safeguarding training to the Safeguarding Steering Group. Despite this the programme of safeguarding training available in C&V is sent to the CAMHS network Clinical Director and the CAMHS staff working within the C&VUHB area are able to access training and can be registered as customers in the training database.

The CAMHS network has their own training officer who included safeguarding training in their TNA. Their LSCB training programme provides domestic Violence training.

Interviews with mothers

Children's health

Physical health problems described by the mothers included asthma for 3 children, two with skin problems and two with developmental or musculo-skeletal foot problems. Each mother described concerns about the behaviour or emotional well-being of at least one child. Three of these were described after the question about children's mental health, 2 concerns emerged later in the interview.

Experience of health care

In general there was reticence to criticise and resignation about the service offered. All the families were registered with one of the GPs in the local area but were not asked to say which one. Experience of registering for some was positive because of help from refuge staff with filling forms.

*'well the boys have been for a check up , they're registered and everything, like **** said they done it all for you'*

For others registering was less positive. One mother described a futile visit because she didn't have her NHS number. She described the receptionist as *'kind of rude'* Having to return another day with her number had put back an appointment by a week.

In the same group another mother described that having left home *'in a hurry'* her NHS card was not something that was packed but she felt embarrassed because she couldn't explain why she didn't have it to the receptionist in the waiting room with other people listening.

Mothers had had some difficulty with health care from the GP, one describing lost records and a prescription with the wrong date of birth and another being refused pain medication prescribed in hospital.

All the mothers were waiting for appointments with a health professional for one or more of their children. For some this was the first time the problem had been addressed in spite of them being concerned for a while. One mother described not being able to go out for appointments.

'I couldn't go out to a mates or to a shop for 10 minutes before i was in trouble'

' it would make the situation worse for all of us'

The mother with outstanding appointments when she entered refuge described uncertainty about transfer of referrals. She was able to go home to get post. She was going to ask the support worker in refuge to phone the hospital for her.

Two mothers had had referrals to CAMHS one was waiting to hear the result and one had had the referral turned down

'.. it was actually no further action taken because you are waiting for the disability team regarding your son aren't you?'

Only one mother had experience of hospital care for a child. She describes the dilemma of not being able to take her other children with her in an ambulance to casualty from the refuge.

'i didn't want to leave them cos like they have been through a lot and i wanted them to know we are all safe together'

Refuge staff had to speak to a manager to be allowed to care for her other children whilst she took one to hospital. During this incident she felt the questioning of the paediatrician was *'very inquisitive'* and didn't feel she needed to share all the details about the child's father. He asked her the number of the refuge which she knew not to give out. The child was fine but she felt pressure to stay in but wanted to get home to her other children.

I was thinking you're not here to know why I'm in refuge or anything; you're here to see my baby. To see if he's OK.

This mother was anxious not to share details about the child's father because on her admission to have the baby, despite instructions to the staff to do otherwise, details were passed on to the child's father that should have been withheld.

'I will never trust them as long as i live now'.

Positive help with health issues had come from a number of sources. One mother described a good GP who had known her for years, 2 mentioned the health visitor for refuge and 3 the refuge staff themselves.

Only one mother could provide a view on what might help them access health care and this was child friendly surrounding that would keep siblings entertained and appointments with time to observe a child's difficulties.

' people don't always see the behaviour and they say oh well he's like that all the time'

Mothers were happy to respond to questions but all seemed surprised to be asked for their views on the health and healthcare of their children. The interview plan was adapted and simplified on every occasion. Within the refuge interruptions were common. Field notes taken at the time show an over whelming feeling of the confusion and turmoil the women's lives were in, held together by refuge staff and friendships made in refuge.

Summary

The objectives of this arm of the study were as below

To ascertain the views of stakeholders about the needs for health care services of children in refuge

To ascertain views of stakeholders of the ways healthcare services could best be provided and why

To ascertain which of these needs or services should in the opinion of those involved with this group of children be prioritised.

The interviews reveal that children come to refuge with a number of unmet needs. Mirroring the research evidence the mental health issues for children were the priority for professionals and of concern for mothers. The designated health visitor for the refuge was seen as a positive factor and alongside the holistic assessment by refuge meant that physical

health issues were identified, immunisation and surveillance were caught up and referrals made. A number of children cause sufficient concern for further mental health advice to be sought and this seemed to be of difficulty with confusion about referral criteria and no links with the CAMHS service. Both refuge and the HV could offer some interventions but sometimes this was not felt to be sufficient.

The turmoil in the lives of these families was a strong theme which front line staff felt needed addressing with shorter waiting times or thoughtfulness about continuity of care even when a family was moving areas within the city.

Mothers have experience of perceiving rudeness and inflexibility from health staff. One mother has had a breach of confidentiality which might have risked her safety and that of her baby. It seemed to have coloured her view of health services for the future. Refuge staff independently described 'one bad experience' influencing future dealings with professionals.

Chapter 5. Discussion

The aims of this study were to answer the following questions:

- What health services do children in a women's refuge need?
- Is there a model of service delivery that would be effective and acceptable in meeting those needs?

There is an increasing body of literature describing the impact on children of living with domestic abuse. This attempts to measure the specific impact of domestic abuse alone and/or postulate the mechanism of effect. More recently there is a move to go beyond looking for a direct and isolated effect and understand the mediators and moderators of any effect. There are a number of difficulties researching this area and combining this evidence.

Samples vary, including only physical domestic violence or extending to all forms of domestic abuse. An accurate sample and exclusion of domestic abuse in controls depends on an honest history from women who may be reticent to reveal domestic abuse. The confidentiality of the setting and the quality of the questions will also influence the responses obtained and sampling accuracy.

The cross-over with child abuse requires similarly sensitive information to be obtained. Definitional issues and accuracy of reported information is a challenge and varies in quality between studies.

Epidemiological studies which seek to measure the specific impact of domestic abuse alone allow for multiple confounders. They risk cancelling out the influence of domestic abuse through mediating factors. Ecological studies are attempting to understand and explain this complexity.

The strongest evidence is that domestic abuse influences negatively a child's mental health, increases risk of child abuse and acts as a barrier to universal health care. The mechanism for these influences is complex. This study has underlined these findings by interrogating the available prevalence data and exploring the views of key stakeholders and mothers in refuge. This study has then explored the evidence for a service model to meet those needs and has shown this to be thin. There is also limited evidence for effectiveness of key health roles.

There is a clear contrast in current service provision between children under 5 and over 5 years coming to refuge. This is despite the fact the key risks to children's health do not seem to diminish with increasing age.

Under 5s

Under 5s have the benefit of a targeted Health Visitor service. It is relatively easy to review the outcomes for young children as data is collected routinely about immunisation and surveillance coverage. These interventions are subject to regular review of the evidence base. The Health Board has a duty to provide this universal service. An argument for ensuring equity has already been persuasive enough to establish targeted health visiting to address the issue of under-immunisation and poor surveillance coverage. Qualitative evidence from this study shows the perceived benefits of this service. The quantitative outcomes have not been re-measured.

In terms of mental health provision for the younger child there is likely to be a smaller role for specialist CAMHS. Mental health promotion will rely more on removing risk factors and providing parenting support and training. This Tier 1 mental health work is primarily provided by Cardiff Women's Aid and other NGOs with signposting and support by the health visitor. The need for more specialist CAMHS advice seems to require a clearer process and remit.

Over 5s

This group of children benefit from assessment by refuge staff but not by targeted health visitor review. Refuge workers liaise with the generic school nurses and feel this is less effective than working alongside a health professional with the experience of the Health Visitor. Scottish health boards are beginning to use a targeted public health nurse for refuge to address all ages of children. Thus far evidence for the effectiveness of this model has not been collected. Outcomes are not a simple to collect as immunisation data although it might be interesting to review the HPV uptake in this group. The access to specialist Tier 2 or Tier 3 CAMHS is reported to be problematic with referral criteria unclear.

Action research

The health service needs assessment as a method allows for an action research methodology. It encourages participation by stakeholders and has the potential to build understanding and encourage changes through the process not just at the end. Although this study was a small and academic exercise it was not ethical to ignore the potential for improving care for these children in the process. Although the PMHW had made contacts by email with the health visitor and the children's team manager in the refuge had heard of them relationships had not been forged at the time of the interviews. The researcher put the PMHW in touch with the team manager by email and hoped this would allow for closer

working. Therefore some changes may have been made as the PMHW role developed and relationships established. This study took place when PMHW in Cardiff were relatively new posts.

The evidence here is discussed under three headings that have evolved as the main themes for the health services for this group of children living in refuge.

1. Access to universal health promotion services
2. Access to primary care and specialist services if and when required other than CAMHS
3. Child and adolescent mental health services

Measuring effectiveness in community child health services is complex. Hall explains that one challenge is to decide how 'immediate or distant' your measure of effectiveness should be. This is pertinent when the aim of a service is to improve general health and well-being and improve long term outcomes for children and families. It may also depend on many factors; we may measure increased access but unless the treatment offered is correct and performed effectively then outcomes will not be improved. Hall postulates that in community child health effectiveness may be more dependent on the skills of an individual in communication or clinical assessment than the effectiveness of a single procedure^[52]. He discusses that often health services are part of multi-agency package leading to difficulties measuring effectiveness of the health service component.

Gerwartz in a review of model for addressing the mental health needs of disadvantaged populations in the USA again stresses its multi-agency nature but states the obvious that can be overlooked. The plan for multi-agency working may be an excellent model but its effectiveness depends on each service involved providing quality of care^[179].

Universal health promotion

Health visiting services, the preschool surveillance programme and immunisation should be available to all children. The surveillance programme based on Health for all Children is designed to use the most up to date evidence for the screening and surveillance of children to promote their health^[52]. The evidence for individual components of the programmes varies in strength and there is an ongoing need for this to be reviewed at intervals and to be changed when necessary. C&VUHB will be expected to have ongoing senior oversight of this programme and guidance about the evidence in order that as a HB they remain up to date and effective. For the purposes of this health service assessment it is assumed therefore that that is the situation and thus the programme is as effective as it can be.

The immunisation programme is subject to similar national oversight with an immunisation coordinator in place for C&VUHB to manage the programme and its processes. For immunisation there is the potential to improve total effectiveness by improving coverage in vulnerable groups who may not otherwise be immunised thus improving herd immunity. In 2009 the National Institute for Clinical Evidence (NICE) published guidance on reducing differences in the uptake of immunisations. They recommend targeting groups at risk of not being fully immunised. The evidence for interventions, which are proven to increase uptake in vulnerable groups, is thin however they state that access to immunisation needs to be improved in this group.

Suggestions about how to improve access include clinic environment and times of opening, tailored invites and reminders, opportunistic immunisation and a consideration of home visits. They also state that transfer of records of immunisations is important. Economic modelling shows that 'efforts to increase MMR is highly cost effective, marginally more so in low-coverage groups'. Home visiting is described as the most expensive way of achieving this but despite that it is cost effective^[160].

The specialist health visitor role to the homeless is in part a response to the acknowledged poor uptake of this group to surveillance and immunisation^[151]. At present there is no evidence available to prove that targeted health visiting has this effect in this population. There is a small study in the USA that suggested a nurse in refuge who provided on site services was able to update some immunisations but in fact only 3 children were in the sample^[113]. However a health visitor meeting mothers in refuge, which is effectively, a 'home visit' according to NICE may well be cost effective. By liaising with refuge and identifying all children as they enter the health visitor can facilitate transfer of records, which is a NICE recommendation. Anecdotally the health visitors feel that they are able to encourage and enable mothers to access immunisation and they provide the surveillance flexibly to mothers in refuge. The data to show the results of their intervention is available on the child health system. There is local data from before their team was in place for comparison and there can also be comparison with whole population data. NICE states that this information should be used to inform needs assessments and health equity assessments^[160].

An important part of universal health promotion is the safeguarding role of the health visitor. There are a large number of studies evaluating home visiting programmes to prove their effectiveness in various parameters of child health. These vary by who does the visiting, when they start and finish and the intensity and nature of the input. Most begin either pre-birth or immediately after birth. Many continue just for a number of months or 2 years. A few continue until age 5. Thus they are not a direct source of evidence when considering the effectiveness of a health visiting service that picks children up as they enter a refuge and continues until they are settled elsewhere. There is no evaluation of a service of this kind.

A very recent systematic review of home visiting programmes for prevention of maltreatment looked at the cost benefit analysis of programmes, which after critical review, showed good evidence of improved outcomes. Many proved not to be cost – effective but the authors were able to report characteristics of the most cost-effective programmes. These were those with ‘professional visitors, targeting high risk populations, and use a comprehensive approach (including more than just the home visits), designed to meet the specific needs of the population’^[16]. They stress the multi-disciplinary working in successful programmes. This of course mirrors the multi-agency working, which is a key priority described in national guidance for safeguarding. This safeguarding guidance is based on studies of serious cases that have been reviewed and is updated after new enquiries^[73].

Therefore in terms of safeguarding services within the refuge setting these parameters would be a useful guide. Whether these findings can be generalised to health services to vulnerable groups in general is less clear.

Not all children in a refuge however are under 5 and would fall under the remit of traditional health visiting. Once a child attends school the school nurse takes over the public health role for the child. The role of the school nurse and her effectiveness for the population in general is poorly researched. Studies fail to produce evidence of effectiveness except in one or two condition specific areas^[161, 162]. There is some evidence that teachers, parents and children value school nurses. The role in Wales has been defined by the Framework for the School nursing service 2009 produced by the Welsh Government^[163]. Safeguarding work and the mental health of children and young people are part of this.

Access to primary care and specialist services if and when required

Access to specialist services varies for any child depending on the area in which they live and is now regulated by the patient’s charter and the timescales set for the local health board. Is there evidence that children in refuge have equity of access to primary care and secondary services? There is no direct evidence or data for the Cardiff children. There is a suggestion in the literature that families living with multiple disadvantages including domestic abuse access emergency care rather than planned care^[112, 115]. Key stakeholders report some frustration at attempts to access primary and secondary care for these children.

The effectiveness of primary health care at a General practice depends on a patient being registered, seeking an appointment when necessary for an appropriate medical issue, attending the appointment and the quality of the advice and treatment provided at that appointment and further appointments if necessary. The effectiveness of any secondary service depends on appropriate referral and attendance at that appointment initially, assuming the assessment and intervention at and following this appointment is evidence based and there is full compliance. This seems a very basic sequence of events but there is

evidence emerging that there are a number of challenges for mothers who are living in refuge at a number of points in that process. Stakeholder views mirror the published literature.

Child and adolescent mental health services

Child and adolescent mental health services in Wales are structured using the 4 tier model suggested in the NHS Health Advisory Service report 'Together We Stand' in 1995 and set out by 'Everybody's Business' the All Wales Child and Adolescent Mental Health Service Strategy^[128]. The rationale for the changes were the increasing evidence for the burden of mental health problems and the significant gap between this and the resources of specialist CAMHS to meet these. In addition Wales has been significantly less resourced for CAMHS services than equivalent areas in England. Childhood mental health problems are known to lead to poor quality of life and poor outcomes in mental health and achievement in adulthood and thus need to be addressed. It is clearly cost effective to address this issue. The tiered model gives to all those who work with children the care of their mental health with a responsibility to identify and intervene to promote well-being. The Primary Mental Health Worker (PMHW) works across tiers, to provide consultation, joint work and training to support the work done at Tier 1.

The face validity of this model in the case of children in refuge is high. The burden of mental health problems, disorders and illness is likely to be high amongst the refuge population. At the very least the safety of the refuge should include an environment where children who have had trauma and fear should be able to express their concerns in an age appropriate way and be listened to and have space and activities that are healing. This is the philosophy of the refuges in Cardiff. The leadership and staff in Cardiff Women's Aid appreciate and strive to fulfil their role at Tier 1. They describe a range of manifestations of children's emotional distress and provide a package of activities and validated parenting programmes.

There is some evidence that children's mental health problems which present as behavioural issues are one of the factors which make it harder for mothers to overcome their difficulties and promote the health and well-being of their families.

This refuge population therefore requires significant work at Tier 1 and thus this needs to be supported.

Children in refuge are still in crisis or at least their family situation is not yet stable. They require a service that can help them whilst other elements of their lives are being re-organised and traditionally this has not as an appropriate time for specialist CAMHS (tier 2 and 3) work. It has not been seen as the right time for some therapeutic interventions and anecdotally an unsatisfactory appointment at a difficult time for a family can damage the faith they may have in CAMHS to help them and reduce the possibility of help being accepted in the future. However these children may spend long periods of their lives in and

out of crisis^[90, 180]. Children's workers in refuge, health visitors or teachers may require advice and support to work to promote the mental health of these children throughout. The refuge workers know what a distressed child looks like and how to help. They also recognise what is above and beyond this and when their usual packages of care and therapy are not meeting a child's needs.

Once mothers have acknowledged that their child requires help, many require support to cope with attending appointments, they need to meet health staff who have empathy and understand domestic abuse and its impact on the whole family. They need to feel safe whilst accepting help and that their child will also be protected. Stakeholder views again mirror the research literature.

The PMHW role offers consultation, liaison and joint work if required in the best setting for the child and family and education and training for Tier 1 workers to increase their confidence and skills in their work^[165]. Working closely with Tier 1 refuge workers will allow the PMHW to increase their understanding of Domestic Abuse at the same time. Working in this way with vulnerable groups does depend on proactive work by PMHW to make links with refuges^[181]. Thus the PMHW does seem to offer a service that might meet the needs of these children in terms of enabling Tier 1 workers to provide interventions and in an acceptable way that is supportive even to families in crisis.

The evidence for any model of CAMHS service is not strong^[167]. The PMHW role is no different and is relatively recent innovation albeit designed to be a solution to well documented issues.

The PMHW model can be based within CAMHS, based in primary care or set up as a dedicated team^[167]. There can be closer links with CAMHS if that is where the PMHW is based and similarly with primary care if that is their base. Being based in primary care increases the risk of professional isolation. Otherwise the way they work does not seem to correlate with their base. There is no evidence of one or other model being superior. Each has advantages and disadvantages^[167].

Consultation and liaison work is the largest part of the role with varying proportions of direct work (joint assessment for example) and education and training for Tier 1 workers^[165].

An important factor seems to be that Tier 1 workers understand the role of the PMHW^[168] and this may, for vulnerable groups, require PMHW to be proactive in seeking contact with relevant professionals^[181]. There is experience of PMHW increasing services to vulnerable groups, more specifically to Looked After children and in some areas these children have dedicated PMHWs^[181].

The PMHW role does increase access to mental health services, increase the range of settings in which this can take place and promotes flexibility in the way care is provided^[167].

There is little evidence in the published research addressing the question about the effectiveness of this role in terms of reducing mental health problems or decreasing their

impact ^[166, 169]. The literature is mainly descriptive, showing how the role has evolved, what it consists of and the characteristics of a 'successful' PMHW ^[165-170, 181].

One study of general practices in England who had opted in or out of the PMHW model compared the number of referrals to specialist CAMHS and found an increase for those who had opted in. There was no comment however about the appropriateness of the referrals ^[170]. A Welsh study however compared 100 referrals pre and post PMHW introduction and found an increase in the appropriateness of the referral and an increase in attendance for appointments from 55% to 78%. The total number remained stable. The quality of the referrals and the decreased non attendance is a significant measure of cost – effectiveness ^[169].

Consultation and liaison is appreciated by Tier 1 workers and is a cost-effective model particularly if as time goes on there is increasing evidence of its impact on mental health problems. There is also no evidence yet that this model produces a lasting change in the behaviour of Tier 1 workers and thus ongoing benefit to children and young people.

A number of studies comment on the importance of the qualities of the PMHW to fulfil the role. The effectiveness of this role depends on their clinical skills and their mental health knowledge ^[165]. This needs to be supported by opportunities for continuing professional development activities. Although a relatively new body of work there is evidence beginning to emerge about the effectiveness of specific interventions at the primary care level ^[166]. Therefore the PMHW must have the dedicated time to be up to date with this evidence and filter that down to Tier 1 workers.

In addition to this knowledge the PMHW needs to be easily accessible, flexible and self-motivated.

A clear gap in the literature is study exploring the users of mental health services about this model of working. One study which attempts to review the literature looking for the views of Looked After children and young people about mental health services found a similar dearth ^[171]. They were able to report on 2 studies only that included Looked After, adopted and abused children. The themes that emerged, albeit needing interpreting in the light of the small amount of data, were ambivalence towards professional intervention, ambivalence towards talking and the value of non verbal communication in helping engagement with therapy. This resonates with the experience from Cardiff refuge staff who find some children 'shut down' and non communicative. They use age appropriate programmes of play based and interactive activities which provide the opportunities for children to begin to communicate in different ways e.g. painting, and then support the development of an understanding that it is safe to communicate about feelings and experiences and ask for help. In this way the work in refuge may have the ability to enable further therapeutic interventions, or in fact be a vital prerequisite.

Reviewing the role of the PMHW and in the light of knowledge about the mode of working within Cardiff Women's Aid there should be complimentary features that allow the model to work well. Cardiff Women's Aid are embracing their Tier 1 role and incorporating programmes of proven effectiveness in their armoury. They are committed to liaison work and open to development. Their assessments of children are detailed and include measures of emotional wellbeing. The PMHW has the capability to be the link with CAMHS, which allows more supported and consultative work at Tier 1. It can work jointly to assess those children which the refuge workers are concerned fall outside their expertise and ensure appropriate referrals go forward to specialist CAMHS when necessary.

Another unanswered question is how much PMHW time is needed for a specific service. The numbers of PMHW vary across areas and there is no evidence. There is a suggestion that the numbers are increased where CAMHS services have more specialist teams but there doesn't seem to be a link with the size of the CAMHS service ^[165]. One area with PMHWs some of which are linked specifically with vulnerable groups is Leicestershire ^[181]. At the time of publishing a paper in 2003 they describe a population of 900,000. Their figures suggest that they have a PMHW for each 11,000 children (under 17s) and the 13 workers they have do not cover the whole child population but are targeted at areas of need. The 2010 midyear estimate of child population for Cardiff is 82,736 under 19s, which now fall under the remit of CAMHS, or 57,051 under 15s. For the under 15s the number of PMHW were Cardiff to emulate Leicestershire, should be 5 PMHW and traditionally CAMHS meets the needs at the very least of the under 16s. In Cardiff at present there are 2 PMHWs.

This numerical consideration must influence the effectiveness of the role although there is no data on ideal provision.

Limitations of the study

A key limitation of this study is that it has been undertaken for a postgraduate qualification by a single part time researcher without funding, and the subject chosen because of her previous research interest in this subject. The drive for this work has not come from a budget holder or commissioner of services. There has been close liaison and cooperation with Cardiff Women's Aid in order to complete this. There has always been the understanding that this could help to investigate what services could be the most effective and to provide evidence for advocacy and prioritisation but was not backed by commissioners seeking to improve services. Therefore although all the individuals interviewed were generous with their time and opinions they were aware that this piece of work was of academic interest only. A health service needs assessment can and should engage the stakeholders more fully, in an authentic assessment the function of this is to bring stakeholders into the process and to embrace changes to services. It may be that within that process you are able to gather more and richer data regarding felt need and barriers to services than in an academic exercise which does not have that element. Performed by a larger group of researchers it would be practical to consult more widely than

a single researcher can, and this may have added to an understanding of the priorities for these children and thus the model of care suggested. Thus the practical capabilities of a single researcher and the exploratory nature of this study will have had an impact on what can be achieved.

Professional respondents consulted will vary as to whether their views of health service needs are based on knowledge and opinions from experience or from training or a mixture of these. They may have attended training in which research on the health of children in refuge has been presented. Health staff particularly may have attended training devised and delivered by the author although this has not moved from defining the health concerns about to children to prioritising these or suggesting a model of service to meet them. This might be considered to be a limitation of this study in terms of how the researcher in her previous research role and clinical role teaching in this health board area might influence the way this groups health needs are thought about. This issue may be considered to be less important in a health service needs assessment than in other empirical research where an independent researcher, to avoid any influence on findings and any bias, is the gold standard. Professionals perspective of this knowledge integrated with their daily work experience is however valuable.

Part of that process can be more consultation on a final model of service. This proposed model is the outcome of the ideas of the author only. Where resources in terms of time and money are scarce the decision of the author was not to ask more of the stakeholders in terms of consultation for a purely academic exercise.

Another limitation of this health service needs assessment is that it doesn't go as far as looking at the multi-agency working that will underpin the effectiveness of the efforts to improve the health of these children. It is not only health services that influence health and the package of care that these vulnerable families need requires cooperation between agencies. This is also apparent in the complex intervention literature where effective and cost-effective programmes for preventing child maltreatment for at risk children all have multi-agency work as a component. This is also the basis of 'working together to safeguard children'.

There has been evidence discussed that emphasises the concept of the mother child dyad and the influence each has on the well being of the other. Failing to meet the health service needs of the women refuge may limit the effectiveness of interventions on children and these have not been reviewed here. Adult mental health services have a role in a comprehensive service to these vulnerable families.

A significant benefit for health services in Cardiff is the programme of assessment and support provided by Cardiff Women's Aid. The understanding of the author is that this is not the case in every refuge and thus looking at the services into which health services are dovetailing would be necessary to evaluate whether this model is transferable to other refuges in other similar cities.

This study only set out to consider the children resident in refuge and the interface of health services with that group at that time. This is however an artificial division in terms of the needs of these families. Cardiff Women's Aid work far more widely than this, supporting children in the community who may not come to refuge and women and children long after they have left the refuge. The health problems discussed in this thesis are the result of living with domestic abuse and other risk factors before arriving in refuge thus there are children throughout Cardiff whose health is similarly at risk. It may be that if services were different for children in the community that children arriving in refuge would have less needs. There are no studies that measure this.

This study concentrated on the Cardiff Women's Aid refuges only. Within Cardiff are Black Association of Women Step Out (BAWSO) refuges. This group of women and children may have some differences in needs. There was evidence in the 1999 study in Cardiff that these children appeared to have much lower levels of emotional and behavioural problems. Children's workers in the refuge who had previously worked in Cardiff Women's Aid refuges reported they had noticed this too. This may be a reflection on the data collection although the tool was validated for use across different ethnic groups. This has never been further investigated and the literature on the emotional well being of children who have lived with domestic abuse does not explore ethnic differences. This group of mother's may have different perspectives of health services it was not possible to include their voice. It is an omission which a funded health service needs assessment should not make.

The other voices, which are not heard in this work, is that of the children and young people themselves. Plans were made to include this but it did not prove possible within the resources of the author working alone. This piece of work, group work with young people 7-11 and 11-16 in order to discover their perspectives of health services is an important missing piece. The voices of children and young people who have lived with domestic abuse about health services is not present in the literature and this could reveal an understanding of their views which could potentially improve service provision.

The literature review for this thesis describing mechanisms of impact of domestic abuse on children's health predicted the findings of the literature describing prevalence for health needs quite closely. However the findings of the literature review was used to inform the structure of the other and it might be that something was missed. The stakeholder interviews mirrored the literature in suggesting mental well-being as a priority with unmet health needs due to access to health care as another issue of concern. Concerns about accessing services for mental health problems were raised.

This health service needs assessment is particularly weak in terms of costing services. In the current climate more resources are unlikely and the emphasis must be on using what resources we have to greatest effect. Evidence of effectiveness and cost-effectiveness has been included where it has been found.

Chapter 6. Conclusions

Applying the Programme Logic Model for complex interventions to this population and using the data collected by this study suggests the following components.

Programme Objectives.

The available evidence is that these are vulnerable children who have a number of risk factors and adverse childhood events that influence their physical and emotional well-being. In addition there are barriers to receiving health care services when they are needed.

Physical health and development

There is low level evidence and emerging theories of causation describing some increased risk of physical health problems. There is no clear evidence of developmental delay in this group of children but many risk factors for impaired development emerging in the literature are common in these children. Current health service provision can meet these needs however the views of local key stakeholders regarding access to services are of concern. Continuity of care is a concern.

Health promotion

There is evidence that children who have lived with domestic abuse miss out or receive delayed care.

Mental health

There is strong evidence that children who have lived with domestic abuse are at increased risk of mental health problems. There is local evidence of a high level of concern regarding mental health problems and disorders in children in Cardiff refuges. There is stakeholder concern about access to services.

Priorities

The health service priority for the children in refuge in Cardiff is their emotional health. It is the area with the strongest evidence of increased need for health services and prevalence and long term poor outcomes. In the short term it may impede the recovery of a family by being an additional stressor, it may impede the progress of school age children educationally and socially. It is the key area of concern for both those working with children and their mothers.

Objectives

Meet the mental health service needs of children in refuge

CAMHS consultation with a PMHW will be available for Tier 1 workers regarding any child in refuge about whom they are concerned once they have performed their initial assessment or the child has settled into refuge and their behaviours are observed to be worrying.

Where Tier 1 workers need support and advice or joint further assessment of a child or young person in refuge a PMHW will be available for this.

PMHW will be available to advise whether a specialist CAMHS appointment is appropriate.

Assess unmet health needs and facilitate access to health care for children fleeing domestic abuse

Ensure children's health needs are assessed and health services configured to promote equitable access.

Population

The defined population is children and young people up to the age of 18 residing in a refuge for mothers fleeing domestic abuse in Cardiff. It could be argued that a similar service should be available for children supported by Cardiff Women's Aid or BAWSO in the community. Another population with similar needs are those living in homeless hostels supported by the same health visiting team as the refuges. There would be an argument for considering these overlapping populations together.

Theory of change

The financial climate for the NHS at the present will ensure that resources to improve services will be scarce. The evidence for a model of care that will provide the outcomes desired is thin. Therefore what is proposed will be as cost neutral as possible and subject to evaluation to ensure cost effectiveness. The evidence for effective multi-agency intervention in this setting is scant and the evidence for effective health service intervention is similarly thin.

Mental health

Everybody working with a child in all settings has a role to play in their mental health. Protecting and supporting mother is a vital part of this. Children in refuge have the benefit of the children's workers to begin to assess and target areas of difficulty. Under 5s will be seen by the health visitor who may give advice. Some children will exhibit behaviours which will suggest they may have mental health problems or mental disorders for which further advice needs to be sought. The PMHW is well placed to be the first point of contact. They can offer flexible consultation and support. They may be able to ensure referrals onwards to specialist

CAMHS are appropriate. There is relatively little evidence of effectiveness of work in primary care settings improving children mental health. That is not evidence that it doesn't work but that little has yet been studied and published. The multi-agency work with families in refuge can tackle the risk factors discussed earlier in this study. There are a number of evidence based programmes for children and young people to improve their emotional well-being^[177, 178]. They may be appropriate for use with the refuge population alongside other interventions. The PMHW could be the source of up to date knowledge of the application of these and the appropriateness of these for a particular case.

All those working with a child have a role in Tier 1 mental health services. This therefore includes professionals at school. PMHW have the same role for the school setting. The health service into school is the school health nurse working to the Framework for the School Nursing Service for Wales. This includes role in the mental health of children particularly from vulnerable groups. It may be that school is an element of continuity for a child.

The context of domestic abuse needs to be fully understood by all those working with the child.

Access to universal services

The principle of equity of health service provision for vulnerable children requires that services are flexible in order to meet the needs of children who might otherwise miss out. There is little evidence to show precisely how services are best configured to ensure equity of access. Targeted services are advised by NICE for immunisation but there is little evidence for NICE to use to be specific about structure. However it may be that it is best to provide local solutions and evaluate and develop these if solutions are very context specific^[160].

There is evidence that the attitudes of staff, their understanding of domestic abuse and their resources to help are important once a mother reaches health services. Experience of services for herself may colour her view of services for children. A mother needs to understand the value of a service to her child and be assured of the safety of herself and her child whilst accessing and after sharing information with that service. Services should be child friendly.

There is a little evidence that health services reaching into the refuge may increase the appropriateness of primary care appointments.

Mothers whose lives are blighted by domestic abuse are more likely to have mental health difficulties and require support to negotiate health services. They need both health and social care for their own difficulties to help them promote the health of their children. Health services have a duty not to be an extra 'intrusion' in the lives of women.

Timeliness

Although there is only qualitative information there seems to be an issue of timeliness of intervention for children, both for mental health care and physical and developmental issues. The 12 week window in refuge is not compatible with the waiting list targets for health services. There is also the opinion that an appointment at a time of instability may be unsatisfactory and colour future contact with services.

There is no evidence which will allow a recommendation of a specific target time for health services for this group. Refuge is a setting which offers increased opportunity for support to access appointments.

Continuity

There is some evidence that continuity of care may be lost for these children and record transfer can be a problem. There is strong evidence of the mobility of these families and some evidence that mobility is a proxy for adverse life events, the outcome of these being poorer health. The part that loss of continuity plays in quality of healthcare is not clear. The principle of maintaining continuity where possible in chaotic lives should be adhered to.

Training

There is evidence that members of health staff who are not trained sufficiently regarding domestic abuse demonstrate less empathy and feel frustrated and uncertain how to help. Health service staff who come into contact with mothers and children require training to know how to assess risk and offer appropriate support to mothers and children where domestic abuse is present.

Programme components

The activities that the theory of change suggests may meet the outcomes are as below and set out in Figure 3

- Domestic abuse training for health staff who come into contact with children and families to include an understanding of their difficulties accessing health services
- Joint training between health service staff and NGO staff supporting these children, content to include domestic abuse, mental health and well being of children, evidence base for interventions.

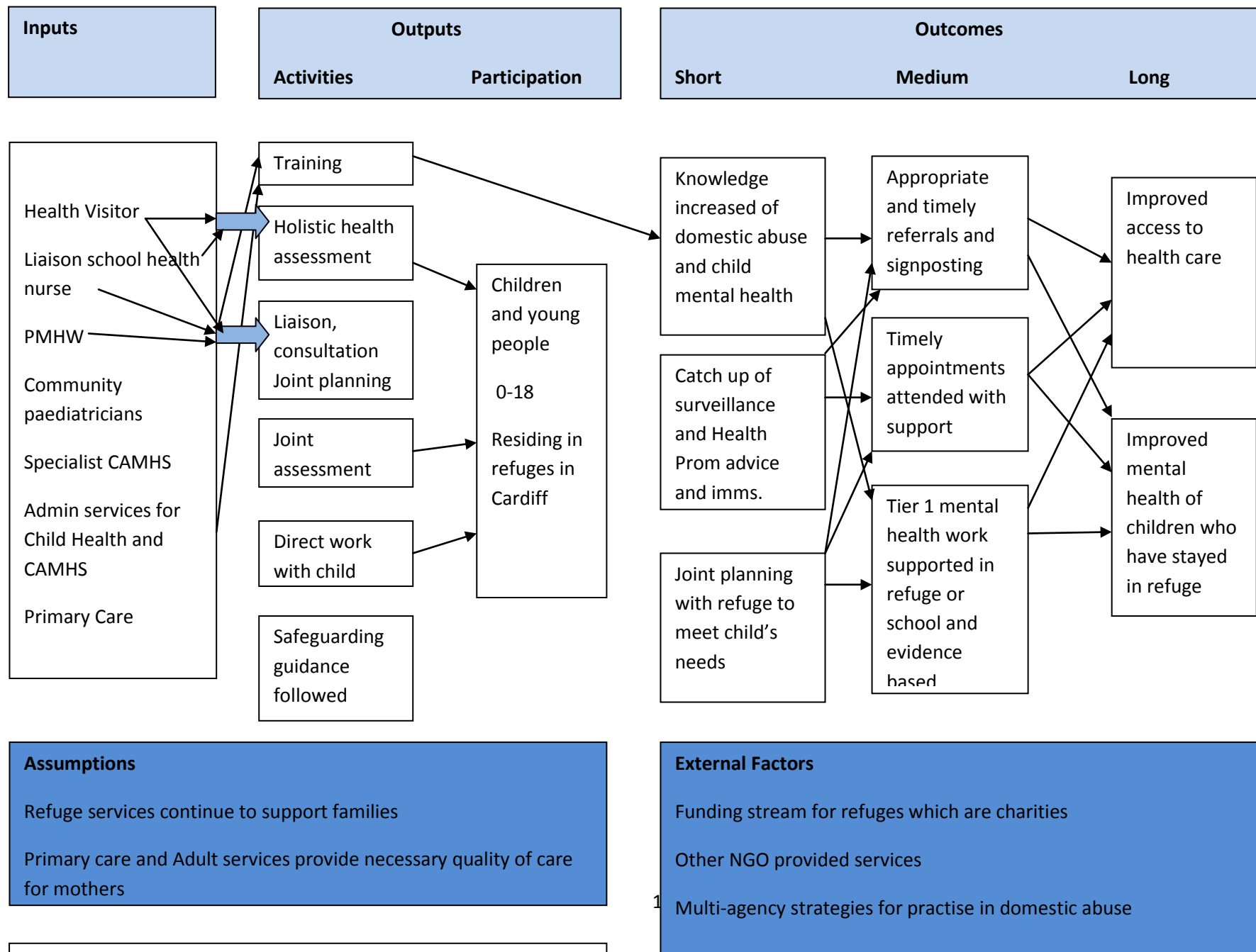


Fig 3 Model for health services to children in refuge in Cardiff

- Individual health workers to access training for their speciality regarding mental health interventions for children and young people
- All children to have health assessment on entering refuge
- Health assessments to ensure appropriate referrals and provide information about need for services and what to expect
- Liaison, consultation and joint planning for children between Health Visitor or School nurse and refuge staff
- Easy access for health and refuge staff to PMHW advice.
- Joint assessment for some children following consultation
- Direct work with child and family as needed
- Referrals to specialist CAMHS as advised by PMHW
- Health staff to take part in multi-agency planning for child welfare
- SHN and PMHW to liaise with education for management and interventions in school setting
- Timeliness of appointments to facilitate attendance and effectiveness to be considered

- Meeting between CAMHS, CCH and refuge Children's Services manager to consider procedure for continuity of care and timeliness of appointments.

Outcome measures

Short Term Outcomes

1. Increase knowledge of domestic abuse and child mental health

Measuring the knowledge base for large numbers of staff is difficult. Measuring whether this has altered attitudes and influences behaviour is more difficult again. A proxy that is widely used in health organisations is attendance at training. Although limited in depth of information, an audit showing how many staff working with children and families had attended relevant training would be possible.

Auditing current training and training strategy for content relevant to the access issues raised would also be practical.

2. Catch up with immunisation and surveillance

The information to audit this is available on the CHS. A sample of children coming through refuge could be audited for immunisation and surveillance coverage at entry and 6 months later

Interrogating records of children who remained behind with the schedule might provide information of value.

3. Joint planning

A target for regular meetings of once a month could be reviewed for frequency and outcomes

Medium Term Outcomes

1. Appropriate referrals and signposting and timely appointments attended with support

Audit of records measuring decision making for referrals, appropriateness of referral, attendance at appointments.

Support for appointments would require some joint audit with Women's Aid

A key component of evaluation would be stakeholder involvement and collecting the experiences of mothers and children and the refuge staff supporting them about their interface with health services would be valuable. This could be as a survey.

2. Evidence based Tier 1 mental health work supported in refuge or school

Survey of staff for perceptions of support and advice available, and interventions offered.

Long Term Outcomes

There is little prevalence data with which to compare outcomes and show improvements with certainty. The outcomes will not be simply a result of health services.

Information and research requirements

Cardiff data

The Cardiff data used in this study is becoming old and re-measuring these indicators will be necessary to monitor effectiveness. This can be done as part of an audit. Cardiff Women's Aid collects a wealth of data about children which can be used for a measure of health needs if collaborative audit was performed. See appendix 2. This would provide further indicators for children against which progress can be measured.

Evidence based practice in Primary Care

There is a large body of literature not reviewed in this thesis about interventions for children to address their mental health needs in the refuge setting. A review of these as a multi-agency partnership could ensure that the package of resources on offer for families is of proven efficacy for this group.

Resilience in Children living with domestic abuse

What is missing from our understanding of these children are factors that provide resilience. This knowledge could allow a prediction of which children are likely to do worse or better and how to work with the most at risk children to reduce the impact.

This would require a longitudinal study collecting a wide range of data about children and families and measurements of health and well-being at intervals.

Summary

Children fleeing domestic abuse with their mothers are a vulnerable group suffering multiple disadvantages. They arrive in refuge with a high incidence of mental health problems and unmet health needs^[90]. Domestic abuse can influence health directly as these children are at increased risk of maltreatment^[80]. This can begin even during pregnancy with assaults and influences on mother's health behaviours detrimental to foetal development^[18, 22]. There is some emerging literature about physical health problems being increased by the stress of living with domestic abuse although no high quality evidence. Domestic abuse directly influences a child's emotional well-being and also influence this mediated by parenting style and maternal mental health^[48]. The homelessness and mobility of these families may lead to poorer health^[119]. A major issue for children is access to health care with a number of barriers to overcome.

Health services in refuge should work to assess health needs and facilitate the family to meet them. They have a duty not to be intrusive' at a time of turmoil for families^[182]. Children require catch up with routine health care such as immunisations and surveillance. They have a range of unmet physical health needs rather than a proven increase in these but require support to access health care.

The mental health of these children is much more at risk than the general population and care for this issue is a priority for professionals and mothers. Advice and support from specialist CAMHS is felt to be hard to access and referral criterion confusing.

The experience of mothers with health care professionals and their support staff can be a barrier to accessing health care. All front line staff for the health board need to understand enough about domestic abuse and be committed to providing an equitable service to be a supportive and facilitating influence for women attending health services.

Health services inflexibility promotes the Inverse Care Law detracting from lack of continuity of care by transferring mobile families between teams and out of date record systems sending appointments astray. Timeliness of appointments is a complex issue. Families who live in crisis cannot wait for stability to access services; it may be a long time coming. Refuge support to attend appointments is a valuable resource for health services potentially reducing missed appointments. However there is an argument for pausing and thinking when is best for clinic based appointments and when a more flexible approach might be

more helpful. The PMHW, refuge and Health Visitor or School Nurse might be well placed to discuss and agree on this.

The logic model method of planning services uses the evidence of what might produce change and uses it to produce a series of activities, which might produce the desired outcome ^[17]. In a field such as this with little to benchmark against it is important to build in evaluation and be prepared to make changes. There is always the possibility of unintended outcomes positive or negative. This study has suggested a collaborative style of working for children mental health problems using the suggested framework from Everybody's Business ^[183]. However there is little workforce data to predict the manpower needed to be successful in this. It may be that as things stand this would be pulling PMHW time away from other children in other settings. Or it may be that these children would have been brought to their attention or on a CAMHS waiting list because of schools concern.

An assumption has been made that for children over 5 a specialist school nurse for the refuge would work better than linking in with individual school nurses based on the experience with the health visiting service. We have only client and colleagues opinions that this service is effective, although it is certainly valued. There is an opportunity here to evaluate that service and to explore how dedicated school nurse (or dedicated public health nurse for school aged children) would work. There is some evidence that going into refuge is effective ^[119, 157].

This group have risk factors for very poor health, social and financial outcomes. An assumption must be made that meeting their needs and decreasing risk factors would lead to a cost saving for services in the future and improved quality of life for survivors or family violence.

Finally the findings of this study show that all health professionals should take every opportunity to advocate for strategies to decrease domestic abuse.

References

1. Brooks, R., *The health of children in a women's' refuge*, in *Department of Child Health*. 1994, University of Wales College of Medicine: Cardiff.
2. Bowling, A., *Public Views of Priorities for Health Services*. 1993, Kings Fund London
3. Welsh Womens Aid *Welsh womens aid services snapshot*
www.welshwomensaid.org.uk/index.php?option=com_content&view=article&id=390%3Acampaign-archive&catid=34%3Auncategorised&Itemid=375%limitstart=2
(accessed 20/9/12)
4. Burns, R., *Cardiff Womens Aid Children and young people's services annual report 2010-2011*. 2011, Cardiff Women's Aid.
5. Hester, M., C. Pearson, and N. Harwin, *Making an Impact - children and domestic violence. A reader*. 1998, Barnado's , NSPCC and Bristol University.
6. Kempe, C.H., *Recent developments in the field of child abuse*. *Child Abuse and Neglect*, 1979. **3**: p. ix-xv.
7. *Working together to Safeguard Children. A guide to Inter-agency working to Safeguard and promote the Welfare of Children* 2010, Department for Children Schools and Families
8. Mirelees-Black, C., *Estimating the extent of domestic violence: findings from the 1992 British Crime Survey*. *Home Office Research Bulletin*, 1995. **37**: p. 1-18.
9. Robinson, A., *Reducing Repeat Victimisation Among High-Risk Victims Of Domestic Violence*. *Violence Against Women*, 2006. **12**(8): p. 761-788.
10. Attala, J., McSweeney, M., *Pre-school children of battered women identified in a community setting*. *Issues Compr Pediatr Nurs*, 1997. **20**: p. 217-225.
11. *National service framework for children, young people and maternity services*. 2004, Department of Health: London.
12. Government, W.A., *national service Framework for Children, Young People and Maternity Services in Wales*. 2006, Welsh Assembly Government.
13. Stevens A, R.A., *Health Care Needs Assessment: the epidemiologically based needs assessment reviews*. 1994, Oxford: Radcliffe Medical.
14. *Queensland Health Changing models of care framework*. 2000, Queensland Health: Brisbane.
15. Williamson, S., *Background paper UK consensus conference on diabetes*. *J R Coll Physicians* 2010. **40**(suppl 17): p. 25-32.
16. Dalzeil, K., Segal, I, *Home visiting programmes for the prevention of child maltreatment: cost effectiveness of 33 programmes*. *Arch Dis Child*, 2012. **97**(9): p. 787-798.
17. Rogers, P., *Using programme theory to evaluate complicated and complex aspects of evaluation*. *Evaluation* 2008. **14**(1): p. 29-48.
18. Holden, G., *Children Exposed to Domestic Violence and Child Abuse: Terminology and Taxonomy*. *Clinical Child and Family Psychology Review*, 2003. **6**(3): p. 151-160.

19. Mezey G Domestic Violence in Pregnancy chapter 12 in *Violence against women*. Bewley S F Mezey G Eds 1999, RCOG Press: London.
20. Burch, R.L. and G.G. Gallup, *Pregnancy as a stimulus for domestic violence*. Journal of Family Violence, 2004. **19**(4): p. 243-247.
21. Jaffe, P.G., Wolfe D A, Wilson S K, *Children of Battered Women*. 1990, Newbury Park, CA: Sage.
22. Sharps, P.W., K. Laughon, and S.K. Giangrande, *Intimate partner violence and the childbearing year - Maternal and infant health consequences*. 2007. **8**(2): p. 105-116.
23. Heaman, M.I., *Relationships Between Physical Abuse During Pregnancy and Risk Factors for Preterm Birth Among Women in Manitoba*. JOGNN, 2005. **34**: p. 721-731.
24. McFarlane J, P.B., Soenken K, *Abuse During Pregnancy: Associations with Maternal Health and Infant Birth Weight*. Nurs Res, 1996. **45**(1): p. 37-42.
25. Webster, J., J. Chandler, and D. Battistutta, *Pregnancy outcomes and health care use: Effects of abuse*. Am J Obstet Gynecol, 1995. **174**(2): p. 760-67.
26. Amaro, H., et al., *Violence during Pregnancy and Substance Use*. American Journal of Public Health, 1990. **80**(5): p. 575-79.
27. Bacchus L, M.G., Bewley S, *Domestic violence: prevalence in pregnant women and associations with physical and psychological health*. European Journal of Obstetrics & Gynaecology and Reproductive Biology, 2004. **113**: p. 6-11.
28. Berenson, A.B., et al., *Perinatal morbidity associated with violence experienced by pregnant women*. Am J Obstet Gynecol, 1994. **170**(6): p. 1760-69.
29. Stephens RP, R.A., Lewin JS, *Bilateral Subdural Hematomas in a Newborn Infant*. Pediatrics, 1997. **99**: p. 619-621.
30. Lewis, G., *Confidential Enquiry into Maternal and Child Health, Sixth Report, Why Mothers Die 2000-2002* 2004, RCOG Press London
31. Cokkinides, V.E. and A.L. Coker, *Experiencing physical violence during pregnancy: Prevalence and correlates*. Family & Community Health, 1998. **20**(4): p. 19-37.
32. Moffit, T.C., A Rutter, M *Strategy for investigating interactions between measured genes and measured environments*. Arch Gen Psychiatry, 2005. **62**(5): p. 473-81.
33. Glaser, D., *Child abuse neglect and the brain*. J Child Psychol and Psychiatry, 2000. **41**(1): p. 97-116.
34. Perry B, P., R Blakely, T Baker, W Vigilante, D, *Childhood trauma, the neurobiology of adaption, and 'use -dependent' development of the brain: How states become traits*. Infant mental health journal, 1995. **16**: p. 271-291.
35. Stark, E., Flitcraft, A, *Women at Risk*. 1996, London: Sage.
36. Pickett, K., Wilkinson, RG, Wakschlag,LS, *The psychosocial context of pregnancy smoking and quitting in the millenium cohort study*. J Epidemiol Community Health, 2009. **63**(6): p. 474-480.
37. Glantz, C., *Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention, and Treatment*. Birth, 1997. **24**(2): p. 129-131.
38. *Antenatal Care. Routine care for the healthy pregnant woman*, in Nice Clinical guideline. 2008.NICE London

39. Hofhuis, W., de Jongste, JC, Merkus, PJF, *Adverse health effects of prenatal and postnatal tobacco smoke exposure on children*. Arch Dis Child, 2003. **88**: p. 1086-1090.
40. Zammit, S., Thomas, K, Thompson, A, Horwood, J, Menezes, P, Gunnell, D, Hollis, C, Wolke, D, lewis, G, Harrison, G, *Maternal tobacco, cannabis and alcohol use during pregnancy and risk of adolescent psychotic symptoms in offspring*. Br J Psychiatry, 2009. **195**(4): p. 294-300.
41. Freid PA, W.B., Gray R, *Differential effects on cognitive functioning in 13- to 16-year-olds prenatally exposed to cigarettes and marijuana*. Neurotoxicology and Teratology, 2003. **25**(4): p. 427-436.
42. Gilbert, R., Spatz Widom, C, Browne, K, Fergusson, D , Webb ,E, *Burden and consequences of child maltreatment in high income countries*. Lancet, 2009. **373**: p. 68-81.
43. Lutz, K., *Abused pregnant women's interactions with health care providers during the childbearing year*. JOGNN 2005 **Mar 34**((2)): p. pp 151-62.
44. Paterson, C.M. and P. Roderick, *Obstetric outcome in homeless women*. BMJ, 1990. **301**: p. 263-6.
45. Downe, S, Finnlayson, K, Walsh, D Lavender, T 'Weighing up and balancing out': a meta-synthesis of barriers to antenatal care for marginalised women in high-income countries. BJOG 2009 Mar;**116**(4):518-29
46. Stewart-Brown, S., *Parenting and Public Health Briefing Statement*. 2005, Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom, London
47. Levendosky, A.A. and S.A. Graham-Bermann, *Behavioural Observations of Parenting in Battered Women*. Journal of Family Psychology, 2000. **14**(1): p. 80-94.
48. Huang, C., Wang, L, Warrener, C, *Effects of domestic violence on behaviour problems of pre-school children: Do maternal mental health and parenting mediate the effects*. Children and Youth Services Review, 2010. **32**: p. 1317-1323.
49. Levendosky, A.A. and S.A. Graham-Bermann, *Parenting in battered women: The effects of domestic violence on women and their children*. Journal of Family Violence, 2001. **16**(2): p. 171-192.
50. Sidebotham, P., Golding J, *Child maltreatment in the 'child of the nineties ' a longitudinal study of parental risk factors*. Child Abuse Negl, 2001. **25**(9): p. 1177-200.
51. Sidebotham, P. and J. Heron, *Child maltreatment in the "children of the nineties": A cohort study of risk factors*. Child Abuse & Neglect, 2006. **30**(5): p. 497-522.
52. Hall, D., Elliman, D, *Health for all Children, Fourth edition*. 2003, Oxford: Oxford University Press.
53. BMA, *Domestic Abuse: a report from the BMA board of science* June 2007, BMA: London.
54. Reichman , N., Teitler, JO, Garfinkel, L, McLanahan, SS, *Fragile families sample and design*. Children and Youth Services Review, 2001. **23**(4/5): p. 303-326.
55. May-Chahal, A., Cawson, P, *Measuring child maltreatment in the United Kingdom: a study of the prevalence of child abuse and neglect*. Child Abuse & Neglect, 2005. **29**: p. 969-984.

56. Roberts, I., Li, L., Barker, M, *Trends in intentional injury deaths in children and teenagers (1980-1995)*. Journal of public health medicine, 1998. **20**: p. 463-6.
57. English, D.J., D.B. Marshall, and A.J. Stewart, *Effects of family violence on child behavior and health during early childhood*. Journal of Family Violence, 2003. **18**(1): p. 43-57.
58. Levendosky, A.A., et al., *The impact of domestic violence on the maternal-child relationship and preschool-age children's functioning*. Journal of Family Psychology, 2003. **17**(3): p. 275-287.
59. Graham-Bermann, S.A., *The social functioning of pre-school aged children whose mothers are emotionally and physically abused*. Journal of emotional abuse, 1997.
60. Jarvis, K.L. and R.W. Novaco, *Postshelter adjustment of children from violent families*. Journal of Interpersonal Violence, 2006. **21**(8): p. 1046-1062.
61. Peled, E. and J.L. Edleson, *Barriers to Children's Domestic Violence Counseling: A Qualitative Study*. Families in Society, 1999. **80**(6): p. 578-586.
62. Wolfe, D.A., et al., *The effects of children's exposure to domestic violence: A meta-analysis and critique*. Clinical Child and Family Psychology Review, 2003. **6**(3): p. 171-187.
63. Kitzmann K, G.N., Holt A, Kenny E, *Child Witnesses to Domestic Violence: A Meta- Analytic Review*. Journal of Consulting and Clinical Psychology, 2003. **71**(2): p. 339-352.
64. Hazen A, C.C., Kelleher K, Barth R, Landsverk J., *Female Caregivers' Experiences With Intimate Partner Violence and Behaviour Problems in Children Investigated as Victims of Maltreatment*. Pediatrics, 2006. **117**(1): p. 99-109.
65. Baldry, A.C., *Bullying in schools and exposure to domestic violence*. Child Abuse and Neglect, 2003. **27**: p. 713-732.
66. Rivett, M.H.E., Harold G, *'Watching from the Stairs': Towards Evidence-based Practice in Work with Child Witnesses of Domestic Violence*. Clinical Child Psychology and Psychiatry, 2006. **11**(1): p. 103-125.
67. Koenen, K.C., et al., *Domestic violence is associated with environmental suppression of IQ in young children*. Development and Psychopathology, 2003. **15**(2): p. 297-311.
68. Harold, G., Haworth, EL, *How marital conflict and violence affects children: theory, research and future directions*, in *Children living with domestic violence*, M. Calder, Editor. 2004, Russell House Publishing: Lyme Regis.
69. Wuest, J., et al., *Intrusion: The Central Problem for Family Health Promotion Among Children and Single Mothers After Leaving an Abusive Partner*. Qualitative Health Research, 2003. **13**(5): p. 597-622.
70. Abrahams, C., *Hidden victims: Children and domestic violence*. 1994, London: NCH Action for children.
71. Fantuzzo, J.W. and R.A. Fusco, *Children's direct exposure to types of domestic violence crime: A population-based investigation*. Journal of Family Violence, 2007. **22**(7): p. 543-552.
72. Grych, J.H., et al., *Patterns of Adjustment Among Children of Battered Women*. Journal of Consulting and Clinical Psychology, 2000. **68**(1): p. 84-94.

73. Department for Children Schools and Families *Working together to safeguard children, A guide to interagency working to safeguard and promote the welfare of children*, London, HM Government. 2010
74. Chemtob, C.M. and J.G. Carlson, *Psychological Effects of Domestic Violence on Children and Their Mothers*. International Journal of Stress Management, 2004. **11**(3): p. 209-226.
75. Mbilinyi, L.F., et al., *What happens to children when their mothers are battered? Results from a four city anonymous telephone survey*. 2007. **22**(5): p. 309-317.
76. Christian C W , S.P., Seidl T, Pinto-Martin J A *Pediatric Injury Resulting From Family Violence*. Pediatrics, 1997. **99**(2).
77. Nelson, K., *The innocent bystander: the child as unintended victim of domestic violence involving deadly weapons*. Pediatrics, 2007. **73**(2): p. 251-252.
78. Fleggon A G, W.M., Brown C, Van As A B , Swinger G H, Peter J C, *Inhuman sheilds - children caught in the crossfire of domestic violence*. SAMJ, 2004. **94**(4): p. 293-296.
79. Gayford, J., *Wife Battering: a Preliminary Survey of 100 Cases*. BMJ, 1975. **1**: p. 194-197.
80. Edleson, J.L., *The Overlap Between Child Maltreatment and Woman Battering*. Violence Against Women, 1999. **5**(2): p. 134-154.
81. Rumm PD, C.P., Krauss MR, Bell MA, Rivera FP, *Identified spouse abuse as a risk factor for child abuse*. Child Abuse and Neglect, 2000. **24**(11): p. 1375-1381.
82. McGuigan, W.M.P.C.C., *The predictive impact of domestic violence on three types of child maltreatment*. Child Abuse and Neglect, 2001. **25**: p. 869-883.
83. Windham, A.M., et al., *Risk of mother-reported child abuse in the first 3 years of life*. Child Abuse and Neglect, 2004. **28**: p. 645-667.
84. Jouriles, E.N., Le Compte, S, *'Husbands' aggression towards wives and mothers, and fathers' aggression towards children: Moderating effects of child gender*. Journal of Consulting and Clinical Psychology, 1991. **59**: p. 190-192.
85. Bowen, K., *Child abuse and domestic violence in families of children seen for suspected sexual abuse*. Clinical Pediatrics, 2000. **39**(1): p. 33-40.
86. Kellog, N.D. and S.W. Menard, *Violence among family members of children and adolescents evaluated for sexual abuse*. Child Abuse and Neglect, 2003. **27**: p. 1367-1376.
87. McKibben L, D.V.E., Newberger E H *Victimisation of Mothers of Abused Children: A Controlled Study*. Pediatrics, 1989. **84**(3): p. 531-535.
88. Rivett, M. and S. Kelly, *'From awareness to practice': children, domestic violence and child welfare*. Child Abuse Review 2006 **Jul 15** ((4)): p. pp 224-42.
89. Rhodes, K.V. and T.J. Iwashyna, *Child injury risks are close to home: parent psychosocial factors associated with child safety*. Maternal & Child Health Journal, 2007. **11**(3): p. 269-75.
90. Webb, E., et al., *The health of children in refuges for women victims of domestic violence: cross sectional descriptive survey*. BMJ, 2001. **323**: p. 210-3.
91. Bair-Merritt M H, B.M., Feudtner C, *Physical Health Outcomes of Childhood Exposure to Intimate Partner Violence: A Systematic Review*. Pediatrics, 2006(117): p. 278-290.

92. Bates L, H.L., Peterkin D, *'A little encouragement': health services and domestic violence*. International Journal of Health Care Quality Assurance, 2001. **14**(2): p. 49-56.
93. Bacchus L, M.G., Bewley S, *Experiences of seeking help from health professionals in a sample of women who experienced domestic violence*. Health and Social Care in the Community, 2003. **11**(1): p. 10-18.
94. Bacchus L, M.G., Bewley S, *Women's perceptions and experiences of routine enquiry for domestic violence in a maternity service*. BJOG, 2002. **109**: p. 9-16.
95. Peckover, S., *'I could have done with just a little more help': an analysis of women's help-seeking from health visitors in the context of domestic violence*. Health and Social Care in the Community, 2003. **11**(3): p. 257-282.
96. Nicolaidis C, C.M., Gerrity M, *Health Care Workers' Expectations and Empathy toward Patients in Abusive Relationships*. J Am Board Fam Pract, 2005. **18**: p. 159-65.
97. Taft A, B.D., Legge D *General practioner management of intimate partner abuse and the whole family: qualitative study*. BMJ online 2004;328:618
98. Hegarty K, T.A., Feder G, *Violence between intimate partners: working with the whole family*. BMJ, 2008. **337**: p. 346-351.
99. Davies J, P.S., Kaups K, Bennick L, Bilello J, *Victims of Domestic Violence on the Trauma Service: Unrecognised and Underreported*. J Trauma, 2003. **54**: p. 352-355.
100. Calder, M., *Towards a framework for assessment and intervention*, in *Children living with domestic violence* M. Calder, Editor. 2004, Russell House Publishing: Lyme Regis. p. 91-93.
101. Richardson, J., et al., *Identifying domestic violence: cross sectional study in primary care*. BMJ, 2002. **324**: p. 274.
102. Parkinson, G.W., R.C. Adams, and F.G. Emerling, *Maternal domestic violence screening in an office-based pediatric practice*. Pediatrics, 2001. **108**(3).
103. Siegel, R.M., et al., *Screening for domestic violence in the pediatric office: A multipractice experience*. Clinical Pediatrics, 2003. **42**(7): p. 599-602.
104. Borowsky, I.W. and M. Ireland, *Parental screening for intimate partner violence by pediatricians and family physicians*. Pediatrics, 2002. **110**(3): p. 509-516.
105. Zink, T.M. and J. Jacobson, *Screening for intimate partner violence when children are present - The victim's perspective*. Journal of Interpersonal Violence, 2003. **18**(8): p. 872-890.
106. Farmer, E., Owen, M, *Child protection practice: Private risks and public remedies*. 1995, Her Majesty's stationery office HMSO.
107. Calder, M., *Contextualising domestic violence*, in *Children living with domestic violence*, M. Calder, Editor. 2004, Russell House Publishing: Lyme Regis. p. 17.
108. Finkelstein, N., et al., *Building resilience in children of mothers who have co-occurring disorders and histories of violence: intervention model and implementation issues*. J Behav Health Serv Res, 2005. **32**(2): p. 141-54.
109. Wright, R., Wright R, Isaac N, *Responses to battered mothers in the pediatric emergency department: a call for an interdisciplinary approach to violence*. Pediatrics, 1997. **99**(2): p. 186.

110. Webb, E. Reader in Child Health Cardiff University *Audit of routine enquiry about domestic abuse by midwives in Cardiff and Vale Health Board*, personal communication 7/7/11.
111. Feder G, H.M., Ramsey J, Taket A, *Women Exposed to Intimate Partner Violence, Expectations and Experiences When They Encounter Health Care Professionals: A Meta-analysis of Qualitative Studies*. Arch Intern Med, 2006. **166**(Jan 9).
112. Onyskiw, J.E., *Health and use of health services of children exposed to violence in their families*. Canadian Journal of Public Health-Revue Canadienne De Sante Publique, 2002. **93**(6): p. 416-420.
113. D'Amico, J.B. and J. Nelson, *Nursing care management at a shelter-based clinic: An innovative model for care*. Professional Case Management, 2008. **13**(1): p. 26-36.
114. Webb, E., *Children and the inverse care law*. BMJ, 1998. **316**: p. 1588-1591.
115. Fairbrother, G., et al., *How do stressful family environments relate to reported access and use of health care by low-income children?* Medical Care Research and Review, 2005. **62**(2): p. 205-230.
116. Cumella, S., E. Grattan, and P. Vostanis, *The mental health of children in homeless families and their contact with health, education and social services*. Health & Social Care in the Community, 1998. **6**(5): p. 331-342.
117. Stainbrook, K.A. and J. Hornik, *Similarities in the Characteristics and Needs of Women with Children in Homeless Family and Domestic Violence Shelters*. Families in Society 2006. **vol. 87**(no. 1): p. pp. 53-62.
118. Dong, M.A., R. Felitti, V. Williamson D. Dube S. Brown D. Giles W, *Childhood residential Mobility and Multiple Health Risks During Adolescence and Adulthood*. Arch Pediatr Adolesc Med, 2005. **159**: p. 1104-1110.
119. Tischler V, K.K., Rustall S, Gregory P, Vostanis P, *A family support service for homeless children and parents: users' perspectives and characteristics*. Health and Social Care in the Community, 2004. **12**(4): p. 327-335.
120. Lissauer T, R.S., Tempia M, Jenkins S, Taylor B, *Influence of homelessness on acute admissions to hospital*. Arch Dis Chld, 1993. **69**: p. 423-429.
121. Whitfield, C.L., et al., *Violent childhood experiences and the risk of intimate partner violence in adults: Assessment in a large health maintenance organization*. Journal of Interpersonal Violence, 2003. **18**(2): p. 166-185.
122. Fantuzzo, J. and R. Fusco, *Children's direct sensory exposure to substantiated domestic violence crimes*. Violence and Victims, 2007. **22**(2): p. 158-171.
123. Edleson, J.L., et al., *Assessing child exposure to adult domestic violence*. Children and Youth Services Review, 2007. **29**(7): p. 961-971.
124. Cavanagh, S., Chadwick, K. *Health needs assessment; a practical guide*. 2005 [cited 4/7/2007]; Available from: www.nice.org.uk/media/150/35/Health_Needs_A_Practical_Guide.pdf.
125. Powles, J., *Addressing competency 11 for the part 11 whilst avoiding incoherent use of 'need'*. 2004: Cambridge.
http://www.phpc.cam.ac.uk/powles/ph/competency_2.doc Accessed Aug2008
126. Dahlgren, G., Whitehead, M, *Health inequalities*. 1998, HMSO: London.
127. Marshall, C., Rossman, GB *Designing Qualitative Research*. 2006, Thousand Oaks California, London: Sage.
128. The National Assembly for Wales, *Child and Adolescent Mental Health Services, Everybody's Business - Strategy Document*. 2001, NAW: Cardiff.

129. Stevens A, G.S., *Health needs assessment. Needs assessment: from theory to practice*. BMJ, 1998. **316**: p. 1448-1452.
130. Meltzer H, G.R., Goodman R, Ford T, *The Mental Health of Children and Adolescents in Great Britain*. 2000, London: the Stationary Office.
131. Green H, M.A., Meltzer H, Ford T, Goodman R, *Mental Health of Children and Young People in Great Britain, 2004*, ONS, Editor. 2005, Palgrave Macmillan, Basingstoke.
132. Clements A, F.D., Parry - Langdon N, *Three years on: Survey of the developmental and emotional well-being of children and young people*. , ONS, Editor. 2008, ONS.
133. Harold GT, Howarth EL How marital conflict and violence affects children: Theory Research and Future Directions Chapter 3 in *Children living with domestic violence*. Calder M Ed. 2004: Russell House Publishing.
134. Royal College of Psychiatrists, *Domestic Violence*, London RCPsych. 2002
135. Tischler, V., A. Rademeyer, and P. Vostanis, *Mothers experiencing homelessness: mental health, support and social care needs*. 2007. **15**(3): p. 246-253.
136. Karamagi, C., Tumtwine, JK, Tyllskar, T, Heggenhougan, K *Intimate partner violence and infant morbidity: evidence of an association from a population based study in eastern Uganda in 2003*. BMC Pediatrics, 2007. **7**(34).
137. Asling-Monemi K, N.R., Persson LA, *Violence against women and the risk of fetal and early growth impairment: a cohort study in rural Bangladesh*. Arch Dis Child, 2009. **94**: p. 775-779.
138. Subramanian, S.V., et al., *Domestic violence is associated with adult and childhood asthma prevalence in India*. International Journal of Epidemiology, 2007. **36**(3): p. 569-79.
139. Heaton, T.B. and R. Forste, *Domestic violence, couple interaction and children's health in Latin America*. Journal of Family Violence, 2008. **23**(3): p. 183-193.
140. Hasselmann M, R.M., *Parental Violence and the occurrence of severe and acute malnutrition in childhood*. Paediatric and Perinatal Epidemiology, 2006. **20**: p. 299-311.
141. Flaherty, E.G., et al., *Effect of early childhood adversity on child health*. Archives of Pediatrics & Adolescent Medicine, 2006. **160**(12): p. 1232-8.
142. Matud, M., *Domestic Abuse and Children's Health in the Canary Islands, Spain*. European Psychologist, 2007. **12**(1): p. 45-53.
143. Graham-Bermann, S.A. and J. Seng, *Violence exposure and traumatic stress symptoms as additional predictors of health problems in high-risk children*. Journal of Pediatrics, 2005. **146**(3): p. 349-354.
144. Peek-Asa, C., et al., *Does parental physical violence reduce children's standardized test score performance?* 2007. **17**(11): p. 847-853.
145. Berenson, A.B., L. Wielichowski, and S. McCombs, *Exposure to violence and associated health-risk behaviors among adolescent girls*. Archives of Pediatric & Adolescent Medicine, 2001. **155**: p. 1238-1242.
146. Stewart G, R.R., Peacock J, *The association of self-reported violence at home and health in primary school pupils in West London*. Journal of Public Health, 2004. **26**(1): p. 19-23.
147. Drennan, S., Stearn, J, *Health Visitors and homeless families*. Health Visitor, 1986. **59**: p. 340-342.

148. Lynch, M.A. and D. Gough, *Reaching all children. Providing services for mobile and marginalised children is challenging*. BMJ, 2001. **323**: p. 176-177.
149. K  rouac, S., et al., *Dimensions of health in violent families*. Health Care for Women International, 1986. **7**(7): p. 413-426.
150. Bair-Merritt M H, C., SS, Burrell, L, Caldera, D, Cheung, T, Duggan, AK (2008) *Impact of intimate partner violence on children's well-child care and medical home*. Pediatrics **121**(3) p. e473-e480
151. Brooks RM, Ferguson T, Webb E, *Health Services to children resident in domestic violence shelters*. Ambulatory Child Health, 1998. **4**: p. 369-374.
152. Asling-Monemi, K., et al., *Violence against women increases the risk of infant and child mortality: a case-referent study in Nicaragua*. Bulletin of the World Health Organization, 2003. **81**(1): p. 10-16.
153. Westra, B. and H.P. Martin, *Children of Battered Women*. Maternal-Child Nursing Journal, 1981. **10**: p. 41-54.
154. Vostanis, P., in *Mental health interventions and services for vulnerable children and young people*, P. Vostanis, Editor. 2007, Jessica Kingsley: London and Philadelphia. p. 149-164.
155. Fowler, D.N. and A. Chanmugam, *A critical review of quantitative analyses of children exposed to domestic violence: Lessons for practice and research*. Brief Treatment and Crisis Intervention, 2007. **7**(4): p. 322-344.
156. Drotar, D., et al., *Identifying and responding to the mental health service needs of children who have experienced violence: A community-based approach*. Clinical Child Psychology and Psychiatry, 2003. **8**(2): p. 187-203.
157. Reilly, S., Graham-Jones, S, Gaulton,E, Davidson,E, *Can a health advocate for homeless families reduce workload for the primary healthcare team? A controlled trial*. Health and Social Care in the Community, 2004. **12**(1): p. 63-74.
158. Graham-Jones, S., Reilly,S, Gaulton,E, *Tackling the needs of the homeless: a controlled trial of advocacy*. Health & Social Care in the Community, 2004. **12**(3): p. 221-232.
159. Heart Of England NHS Trust *The Solihull Approach*. Available from: <http://communityservices.heartofengland.nhs.uk/default.asp?page=376>. (accessed 2/7/1)
160. NICE, *Reducing differences in the uptake of immunisation (including targeted vaccines) among children and young people under 19 years*. NHS National Institute for Health and Clinical Excellence. 2009
161. Brooks, F., Kendall, S, Bunn, F, Bindler, R, Bruya, M (2007) *The school nurse as navigator of the school health journey: developing the theory and evidence for policy*. Primary Health Care Research, **8**(3) p. 226-234
162. Kennedy, C., Elliot, L, Rush, R, Hogg, R, Cameron, S, Currie, M, Hall, S, Miller, M, Plunkett, C, Lauder, W, *A Review of nursing in the community. Baseline study*. 2009, Scottish Government Social Research.
163. Welsh Assembly Government *A framework for the school nursing service for Wales*, Cardiff, Welsh Assembly Government 2009
164. Bradley, S., Kramer, T, Garralda, M E, Bower, P, MacDonald, W, Sibbald, B, Harrington, R, *Child and adolescent mental health interface with primary services: a survey of NHS provider trusts*. Child and adolescent mental health, 2003. **8**(4): p. 170-176.

165. Bradley, S.H., N, Kramer, T, Garralda, E, *What makes a good CAMHS primary mental health worker?* Child and adolescent mental health, 2009. **14**(1): p. 15-19.
166. Macdonald, W., Bradley, S, Bower, P, Kramer, T, Sibbald, B, Garralda, E, Harrington, R, *Primary mental health workers in child and adolescent mental health.* Journal of Advanced Nursing, 2004. **46**(1): p. 78-87.
167. Hickey, H., Kramer,T, Garralda, ME, *Developing the primary mental health worker role in England.* Child and adolescent mental health, 2010. **15**(1): p. 23-29.
168. Hodgson, N., *Improving communication between health visitors and primary mental health workers.* Paediatric Nursing, 2009. **21**(7): p. 34-37.
169. Whitworth, D., Ball, C, *The impact of the primary mental health worker on referrals to CAMHS.* Child and adolescent mental health, 2004. **9**(4): p. 177-179.
170. Weiner, A., Rodwell, H, *Evaluation of a CAMHS in primary care service for general practice.* Child and adolescent mental health, 2006. **11**(3): p. 150-155.
171. Davies J, W., J, *Children's voices: A review of the literature pertinent to looked -after children's views of mental health services.* Child and adolescent mental health, 2008. **13**(1): p. 26-31.
172. National Assembly for Wales *Domestic violence : a resource manual for health care professionals in Wales.* Cardiff, National Assembly for Wales. 2001
173. WAFE, *National service standards for domestic and sexual violence.* Women's Aid Federation of England. 2006
174. *Vision for services for children and young people affected by domestic violence-guidance for local commissioners of children's services,* Local Government Association, ADSS, Women's Aid, CAFCASS 2006
175. Humphreys, C., et al., *From Good Intentions to Good Practice:* Bristol.
176. Hall, D. and J. Williams, *Safeguarding, child protection and mental health.* Archives of Disease in Childhood, 2008. **93**(1): p. 11-13.
177. Sanders M, C.W., Markie-Dodds C (2003) *The Triple P-Positive Parenting Programme: a universal population-level approach to the prevention of child abuse.* Child Abuse Review **12**(3): p.156-171
178. Webster -Stratton C *The Incredible Years: parents, teachers and children's training series. Program Overview -Fact Sheet.* www.incredibleyears.com/download/program/incredible-years-factsheet.pdf (accessed 8/6/12)
179. Gewirtz, A.H. and G.J. August, *Incorporating Multifaceted Mental Health Prevention Services in Community Sectors-of-Care.* Clinical Child and Family Psychology Review, 2008: p. 1-11.
180. Berlinger, J., *Why dont you just leave him?* Nursing,1998. **28**(4): p. 34-6.
181. Gale, F., Vostanis, P, *The primary mental health worker within child and adolescent mental health services.* Clin Child Psychol Psychiatry, 2003. **8**: p. 227-239.
182. Wuest, J., M. Ford-Gilboe, and M. Merritt-Gray, *Intrusion: the central problem for family health promotion among children and single mothers after leaving an abusive partner.* Qualitative Health Research 2003 **May 13**(5) p. 597-622.

183. National Assembly for Wales, *Child and Adolescent Mental health Services. Everybody's Business*. Cardiff, Welsh Assembly Government 2001.

Appendix 1. Search strategy

The following databases were searched

- Medline via Pubmed
- Psychinfo
- Scopus
- Assia
- Cinahl
- Web of knowledge

Limits :

English Language

1970 – 2008 with alerts from Medline and Scopus to updated searches until July 2012.

Search terms

Child or infant or adolescent or teenager*

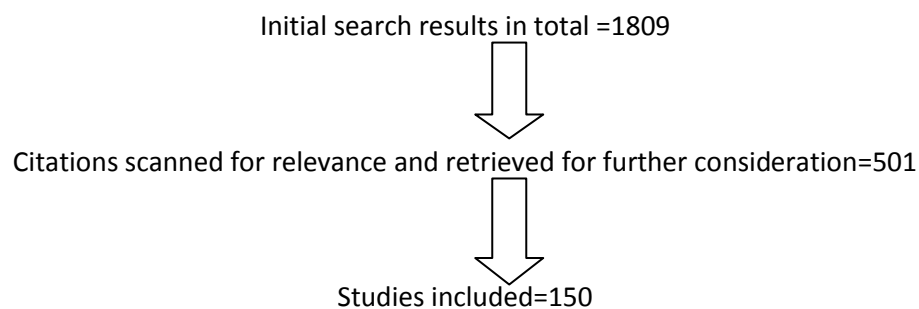
And

Domestic violence or domestic abuse or battered females or spouse abuse or inter partner violence or refuge or shelter

And

Health or welfare or mental health or emotional health or health service or health promotion or primary care or general practice or health worker or health professional or attitudes or knowledge or access or interventions or pregnancy or health visitor or school health nurse or school nurse or primary mental health worker .

Grey literature was searched. This was accessed by a Google search using the terms domestic abuse and children and a hand search of websites for governmental and non-governmental organisations relevant to children's health and well-being.





Trips / Outings / Visits /
Parent / Guardian General Consent Form

Child's Name:

I understand that by signing this consent form, I am giving consent for my child to go on trips, outings and visits organised by Women's Aid / Welsh Women's Aid, that fall into the two categories below:

Category one definition: Visits to places that are local (less than an hour journey, take place on a regular basis, are non hazardous, and largely take place within working hours e.g. sporting activities such as trips to the local park, pool, cinema, museum, swimming pool, bowling etc.

Category two definition: One off day/evening excursions, are non hazardous. Such as field trips, theatre visits and educational visits that are not local (more than one hours journey) and are involve the use of facilities that the organisation expects to use on a one off basis rather than on a regular basis.

In doing so, I understand that my consent is general and will apply to all such activities that fall into the above categories, and my consent will not be obtained each time one of the above activities takes place.

Mothers Signature:

Date:

Any special dietary needs of any of the children	
Any medical conditions of any of the children	
Any conditions that will require us to administer or supervise the self administration of medication to a child	
Where medication needs to be administered by an adult we will need your consent to do this. Please sign if you are happy for us to do this while on the outing/trip/activity.	Signature: Date:
Any other information we should know about in order that we can maintain the safety and well-being of your children while they are with us.	



CYP FILE

Initial Assessment Stage

		Reason Not Completed within timescale?
When was child referred/ Came into refuge?		
When was risk assessment completed?		
Who by?		
Who is delivering the support?		
What support was required?		
Date of initial review		
Date of next review		
Date of next review		
Date of next review		
Date of next review		
Date of Signing Off		



Trips / Outings / Visits /
Parent / Guardian General Consent Form

Child's Name:

I understand that by signing this consent form, I am giving consent for my child to go on trips, outings and visits organised by Women's Aid / Welsh Women's Aid, that fall into the two categories below:

Category one definition: Visits to places that are local (less than an hour journey, take place on a regular basis, are non hazardous, and largely take place within working hours e.g. sporting activities such as trips to the local park, pool, cinema, museum, swimming pool, bowling etc.

Category two definition: One off day/evening excursions, are non hazardous. Such as field trips, theatre visits and educational visits that are not local (more than one hours journey) and are involve the use of facilities that the organisation expects to use on a one off basis rather than on a regular basis.

In doing so, I understand that my consent is general and will apply to all such activities that fall into the above categories, and my consent will not be obtained each time one of the above activities takes place.

Mothers Signature:

Date:

Any special dietary needs of any of the children	
Any medical conditions of any of the children	
Any conditions that will require us to administer or supervise the self administration of medication to a child	
Where medication needs to be administered by an adult we will need your consent to do this. Please sign if you are happy for us to do this while on the outing/trip/activity.	Signature: Date:
Any other information we should know about in order that we can maintain the safety and well-being of your children while they are with us.	

Children's Information

Name		Date of birth	Age	Gender	
				Male	Female
Ethnicity		CYP's first language and other languages spoken			
White British	White European	Asian British			
White Welsh	White Other	Asian Other			
White Irish	Black British	Traveller			
White English	Black Other	Other			
Siblings name	Age	Gender	Relationship	Are they in contact with them/type of contact?	
Fathers name	Does the child have contact with the father?		Fathers Contact details		
Does the child have any disabilities or long term health conditions? Expand – details, any special requirements etc.		Is the child SEN registered? Give details.			

Children's Information

Childs GP/previous	Childs Dentist/previous	Childs Optician/previous
Childs health visitor	Medical illness/medication	Allergies/food intolerances
Creche, Nursery, School/previous	School attendance/ any issues	Any involvement with Education Welfare Officer/ Curfews, ASBOs etc.

Mothers Information

Mothers name	Contact details	Date of birth	Age
Perpetrators name and location	Mothers contact with perpetrator	Childs contact / relationship with perpetrator - court ordered etc	
Any other services involvement with the family e.g. parenting, flying start, CAFcass etc			

Risk Assessment

Date of assessment:		Completed by:	
Do Social Services recognise that the child is a Child in Need?	Is the child on the Child Protection register?	Reasons why Child Protection referral was made?	
Social worker details:	Any persons who should not have contact with the child?	Has the child witnessed /experienced abuse?	
Is it safe to visit the home?	Does the perpetrator visit the home? If so give details.	Is it safe to send mail / email / phone or contact at home?	
Any other issues which could present a risk to other children or staff?			
Risk to the child High Medium Low		Risk to staff and others High Medium Low	

Risk Management Plan			
Risk	Management plan		

Plan agreement between	Parent	Child/Young Person (if applicable)	Worker
Print			
Sign			
Date			

Assessment for Children/Young Persons Parent/Carer

<p>Has the perpetrator</p> <p>Ever treated, or threatened to treat, the child/ren in an inappropriately physical manner? (eg. Hit them, thrown things at them or near them, encouraged them to hurt pets, injured them, made threatening gestures, etc.)</p>	
<p>Ever treated, or threatened to treat, the child/ren in an inappropriately emotional manner? (eg. Deliberately causing distress or frightening them, not comforting them if they feel distressed, criticised, ignored or treated with hostility)</p>	
<p>Ever treated, or threatened to treat, the child/ren in a neglecting manner? (eg. Prevented them from having adequate heating or clothing, prevented them from having regular healthy meals, prevented them from seeing a doctor, made it difficult for you to provide such things etc.)</p>	
<p>Ever treated, or threatened to treat, the child/ren in an inappropriately sexual manner? (eg. Touching them in a sexual manner, saying lewd things to them, not allowing the child age appropriate dignity such as bathing by self, closing door whilst changing, etc.)</p>	
<p>Ever interrupted your child/ren's routine? (eg. Disturbing bedtimes, disrupting mealtimes, bath times, etc.) How often did this happen? (Several times a day, daily, weekly, etc.)</p>	
<p>Ever threatened to report you to Social Services, or take custody of, or kidnap your child/ren?</p>	
<p>Ever forced or insisted your child/ren to watch or participate in the abuse you have experienced?</p>	
<p>Physically or verbally abused you in front of your child/ren?</p>	
<p>Has your child/ren ever intervened in physical/verbal assault to protect you, another child, or to stop the violence?</p>	
<p>Has your child/ren experienced any key events which may impact upon them (eg. death of a loved one, fire in home, car accident etc.)</p>	

High Support Needs		Details of Behaviour
Self Harming	Y/N	
Depression/Anxiety	Y/N	
Abusive Behaviour (eg. being physical, emotional or sexually abusive)	Y/N	
Eating Disorders (eg. Overeating, under-eating, deliberately making themselves sick)	Y/N	
Uncontrollable Angry Outbursts	Y/N	
Sexually Harmful Behaviour (eg. Several partners, unprotected sex)	Y/N	
Issues with drugs/Alcohol How often and amount?	Y/N	
Re-enactment of the Abuse	Y/N	
Inappropriate Knowledge of Adult Affairs (eg. Finances, abuse, counselling, police complaints, health etc)	Y/N	
Not Attending School How often has this happened?	Y/N	
Attachment Difficulties (eg. Cries persistently when leaving parent or relative, requires holding for long periods etc.)	Y/N	
Often complain of stomach aches/headaches	Y/N	
Involved in Unhealthy Relationship (eg. An abusive, controlling, jealous relationship, or with a much older/younger person)	Y/N	

Medium Support Needs

Details of Behaviour

Bed Wetting	Y/N	
Temper Tantrums How often?	Y/N	
Insecure (eg. Doesn't feel confident in relationships, themselves, their abilities etc.)	Y/N	
Nightmares/Flashbacks What happens?	Y/N	
Confused	Y/N	
Issues Around School (eg. Attendance, anxiety, study, ability, bullying, other teachers, lunch and break times, going to and from etc.)	Y/N	
Bullying (eg. Has complained of bullying or has been accused of bullying)	Y/N	
Avoidance (eg. Avoiding contact, talking, engaging with workers or teachers etc.)	Y/N	
Hyperactivity	Y/N	
Minimising (eg. Saying things aren't as bad as they really are)	Y/N	
Difficulties Sleeping	Y/N	
Difficulties Getting on With Family Member(s) in Household	Y/N	

Low Support Needs

Details of Behaviour

Difficulties with Routines	Y/N	
Difficulties with Boundaries	Y/N	
Difficulties with Peer Relationships (eg. Friendships as well as romantic relationships etc.)	Y/N	
Fussy Eaters	Y/N	
Clinginess (eg. Finds it difficult to leave parent, relative, friend etc.)	Y/N	
Isolation (eg. Doesn't see and/or speak with family or friends etc.)	Y/N	
Lack of Stimulation (eg. Watches TV or plays computer all day and very little else etc.)	Y/N	
Lack of Socialisation (eg. Doesn't go out much, doesn't see friends, doesn't do after school activities, doesn't join in family activities etc.)	Y/N	

Any other issues/concerns?

.....
.....
.....
.....

Signed:(parent).....

Date:.....

Signed: (Worker)

Print Name:

ASSESSMENT - MY EXPERIENCES

1. What do you remember about the arguing and the fighting?	2. Whats the worst thing that happened?
3. How did you feel when the arguing / fighting happened?	4. What did you do?
5. Why do you think the arguing / fighting happened?	6. Did you ever think it was your fault?

SUPPORT PLAN

Support Requirement	High Medium Low	Action required to meet this	What is the intended Outcome / goal	Target/ review date	Completed? Why?

Child/YP's signature:

Date:

Workers signature:

Date:

REFERRALS

Date	Referral made to	Reason for referral

SIGNING OFF SHEET

Childs/YP name:	Date:
CWA Worker:	
<u>Reason for signing off:</u>	
Support work completed	Family left Service
Child/YP refuses to engage	Mother didn't engage
Mother no longer receiving support	Unable to contact
Other please state	
Child/YP signature	
Mother's signature	
CWA worker's signature	



Face to face interview – version 1, 6/8/09

Stakeholder views of the health service needs of children living in refuges for women fleeing domestic abuse.

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

(Part 1 tells you the purpose of this study and what will happen to you if you take part. Part 2 gives you more detailed information about the conduct of the study).

Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

This research is for an MD thesis that I am studying for at Cardiff University.

I am undertaking a systematic assessment of the health services for children in refuges in Cardiff. This includes

- Reviewing all the evidence in the medical literature about the health of children in refuges and what works to meet their health needs.
- Comparing Cardiff to other areas
- Asking people in Cardiff who are or who have been involved with children in refuges for their views about their health needs

This last section is the part I am asking you to participate in.

I am working towards putting the information from all the above sections together and if possible recommend better model of health services for children in refuges

Why have I been invited?

A range of people involved with this group of children is being invited for their views. This includes mothers, workers from voluntary agencies working with families where there is Domestic Abuse, and workers with the Cardiff and Vale NHS Trust and Cardiff Children's Services department. I will also be talking to children and young people. You have been asked because it is important to collect a full range of views from all those whose opinions could be valuable. You are a key stakeholder in the area of service provision for domestic abuse and your expertise in this area will be very valuable to the study.

Do I have to take part?

It is up to you to decide. I will describe the study and go through this information sheet, which I will then give to you. I will then ask you to sign consent form to show you have agreed to take part. You are free to withdraw at any time, without giving a reason. If you are a mother of a child in a women's refuge this will not affect the health care they will receive.

What will happen to me if I take part?

I will arrange at your convenience to interview you about your opinions on the health service needs of children in refuge. I will interview somewhere convenient to you and where your views cannot be overheard by anyone else. I will tape the interview so that I can keep a record of exactly what you said, type it up later and think carefully about your opinions.

The interview will take at most an hour although this will depend on how much you wish to tell me.

What will I have to do?

You will have to attend the meeting that we set up at your convenience. You will have to answer a series of questions about the health of children in refuge from either your own experience or your knowledge from studying the subject. Both things are valuable to the study; I may ask you whether you are answering from experience or your knowledge from study or training.

What are the possible disadvantages and risks of taking part?

You may feel that it would be frustrating if you have strong views about what needs to be improved and nothing changes despite your contribution to this study. I cannot guarantee that anything will change.

What are the potential benefits of taking part

The information from this study will be presented to those concerned with the services to children in refuge to allow them to consider the need for any changes. This type of study has not been published from elsewhere in the UK and the results may be helpful to services in other areas.

Will my taking part in the study be kept confidential

Yes. I will follow ethical and legal practice and all information about you will be handled in confidence. The details are included in Part 2.

If the information in Part 1 has interested you and you are considering participation please read the additional information in Part 2 before making any decision.

Part 2

Will my taking part in this study be kept confidential?

- The interviews will be taped and notes will also be taken to help the researcher describe views collected accurately.
- The tapes and notes will be stored under lock and key in the department of Child Health at Cardiff University
- The information from the tapes will be typed out without including any names or identifying information except by code known to the researcher. Data on computer will be kept securely in the Cardiff University system and password protected following Cardiff University data protection guidance.
- Only the researcher and any research assistant will have access to the data.
- The data will be kept until the study is finished and published, this will take approximately 3 years. The tapes will be wiped clean.

Complaints.

If you have a concern about any aspect of this study you should ask to speak to the researcher who will do her best to answer your questions (Tel. 02920 744562). If you remain unhappy and wish to complain formally, you can do that through the Research and Commercial Division, 7th Floor 30-36 Newport Road Cardiff CF24 OD Tel: 02920879277.

What will happen to the results of the research?

- They will be written up as an MD thesis by the research which will be available in the Cardiff University Library
- They will also be written up in shorter form for publication in relevant medical journals
- A report will be compiled and sent to all those who have contributed and to others who are identified who may be able to use information in the report to benefit children in refuge.
- In all of the written material there will be no detail that will allow identification of those who have provided their views.

Who is organising and funding the research?

The research is being organised by Dr Rachel Brooks as a study towards her MD thesis supervised by the Department of Child Health Cardiff University.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, a Research Ethics Committee to protect your safety, rights well being and dignity. This study has been reviewed and given a favourable opinion by the South East Wales Research Ethics Committee.

For further Information Contact

Dr Rachel Brooks

Dept Child Health

Cardiff University

Heath Park

Cardiff CF10 4XN

Tel. 02920 744562

Appendix 3 Question framework interviews. Version 2

Introduction

For my study I am reviewing the evidence about the health of children using refuges for women fleeing domestic violence. I want to use this information to look at health service provision to this group of children and whether there is evidence for a more effective programme. At the end of the study I want to be able to describe that service and how it could have its effectiveness audited in the future.

I am doing this for an MD thesis so I can't say that my conclusions will influence health serves. I will however disseminate my findings to those who could use them to advocate for this group of children and to those who make decisions about health services.

As part of this I feel you have knowledge and expertise that is valuable. Can I just check again that you are happy for me to interview you for this study? Your comments will be anonymous in any report and kept confidential as mentioned in the information sheet.

Q1: Can you describe for me your role in working with this group of children?

Q2: What in your experience are the health issues for the children passing through refuge?

Prompts

Physical/Mental

Primary care/Secondary care

Prevention/Acute care

Q3: Health care services include community and hospital services and are provided by a range of health professionals. How do you feel that current healthcare services meet the needs of this group of children?

Above prompts + access

Enough services/appropriate services/accessible services

Q4: If you had to prioritise health care services what would be your top priorities?

Q5: I am setting out to discover whether there may be health care service provision that is evidence based and acceptable to those working with these children, their mothers and to the children themselves. Is there anything else that you haven't mentioned that you would like to say?

Appendix 4 Focus group – mothers – question route, version 2

To begin could you give your name and the ages and sex of your children

Q2: How do you feel about the physical health of your children?

Q3: How do you feel about the mental health of your children?

Q4: Do you feel that the current health services meet the needs of your children?

Q5: What makes getting health care for your children easier?

Q6: What makes getting healthcare for your children difficult?

Q9: I wanted you to help me to understand the needs for health services of children in refuge. Is there any thing I have missed? Is there anything else you would like to say?



Participant Information Sheet – Mothers Group Interview

Stakeholder views of the health service needs of children living in refuges for women fleeing domestic abuse.

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

(Part 1 tells you the purpose of this study and what will happen to you if you take part. Part 2 gives you more detailed information about the conduct of the study).

Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

This research is for an MD thesis that I am studying for at Cardiff University.

I am undertaking a systematic assessment of the health services for children in refuges in Cardiff. This includes

- Reviewing all the evidence in the medical literature about the health of children in refuges and what works to meet their health needs.
- Comparing Cardiff to other areas
- Asking people in Cardiff who are or who have been involved with children in refuges for their views about their health needs

This last section is the part I am asking you to participate in.

I am working towards putting the information from all the above sections together and if possible recommend better model of health services for children in refuges

Why have I been invited?

A range of people involved with this group of children is being invited for their views. This includes mothers, workers from voluntary agencies working with families where there is Domestic Abuse, and workers with the Cardiff University Health Board and Cardiff Children's Services department. I will also be talking to children and young people. You have been asked because it is important to collect a full range of views from everybody whose opinions could be valuable.

Do I have to take part?

It is up to you to decide. I will describe the study and go through this information sheet, which I will then give to you. I will then ask you to sign consent form to show you have agreed to take part. You are free to withdraw at any time, without giving a reason. If you are a mother of a child in a women's refuge this will not affect the health care they will receive.

What will happen to me if I take part?

I will arrange at your convenience to interview you with a group of others mothers about your opinions on the health service needs of children in refuge. I will interview somewhere convenient to you. I will tape the interview so that I can keep a record of exactly what you said, type it up later and think carefully about your opinions.

The interview will take an hour or so although this will depend on how much you wish to tell me.

What will I have to do?

You will have to attend the group that we set up at your convenience. The group will be asked to answer a series of questions about the health of children in refuge. There will be no

right or wrong answers and you may not all think the same thing. I need to collect everybody's views.

What are the possible disadvantages and risks of taking part?

You may feel that it would be frustrating if you have strong views about what needs to be improved and nothing changes despite your contribution to this study. I cannot guarantee that anything will change.

Within a group interview you may find that others in the group strongly disagree with your views. The researcher running the group will organise the session and run the session in away which should minimise any conflict within the group.

If you comments during the interview indicate that you or your child are at risk of harm or have a health issue that needs some attention then the researcher will not be able to ignore this. She will discuss with you after the event the way forward to deal with the issue. She will at all times follow guidance on safeguarding of children.

It may be that issues discussed during the interview are upsetting to you. Support following the interview will be available to you in this instance.

What are the potential benefits of taking part

The information from this study will be presented to those concerned with the services to children in refuge to allow them to consider the need for any changes. This type of study has not been published from elsewhere in the UK and the results may be helpful to services in other areas.

Will my taking part in the study be kept confidential

Yes. I will follow ethical and legal practice and all information about you will be handled in confidence. The details are included in Part 2.

If the information in Part 1 has interested you and you are considering participation please read the additional information in Part 2 before making any decision.

Part 2

Will my taking part in this study be kept confidential?

- The interviews will be taped and notes will also be taken to help the researcher describe the views collected as accurately as possible.
- The tapes and notes will be stored under lock and key in the department of Child Health at Cardiff University
- The information from the tapes will be typed out without including any names or identifying information except by code known to the researcher. Data on computer will be kept securely in the Cardiff University system and password protected following Cardiff University data protection guidance.
- Only the researcher and research assistant will have access to the data.
- The data will be kept until the study is finished and published, this will take approximately 3 years. The tapes will be wiped clean.

Complaints.

If you have a concern about any aspect of this study you should ask to speak to the researcher who will do her best to answer your questions (Tel. 02920 744562). If you remain unhappy and wish to complain formally, you can do that through the Research and Commercial Division, 7th Floor 30-36 Newport Road Cardiff CF24 OD Tel: 02920879277.

What will happen to the results of the research?

- They will be written up as an MD thesis by the research which will be available in the Cardiff University Library
- They will also be written up in shorter form for publication in relevant medical journals
- A report will be compiled and sent to all those who have contributed and to others who are identified who may be able to use information in the report to benefit children in refuge.
- In all of the written material there will be no detail that will allow identification of those who have provided their views.

Who is organising and funding the research?

The research is being organised by Dr Rachel Brooks as a study towards her MD thesis supervised by the Department of Child Health Cardiff University.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, a Research Ethics Committee to protect your safety, rights well being and dignity. This study has been reviewed and given a favourable opinion by the South East Wales Research Ethics Committee.

For further Information Contact

Dr Rachel Brooks

Dept Child Health

Cardiff University

Heath Park

Cardiff CF10 4XN

Tel. 02920 744562