Health

MORTALITY AMONGST THE HOMELESS POPULATION IN DUBLIN

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Glossary of terms

CSO	Central Statistics Office
DRHE	Dublin Region Homeless Executive
GRO	General Register Office
PASS	Pathway Accommodation and Support System
SMR	Standardised Mortality Ratio
NDTRS	National Drug Treatment Reporting System
LTA	Long Term Accommodation
STA	Short Term Accommodation

Acknowledgements

Executive Summary

Three hundred and forty three homeless people were verified as having died in the Dublin region between 2005 and 2015. More than three quarters were male (n=263/76.7%). However, due to probable incompleteness of recording of deaths in the homeless population, the number presented is a minimum number of known deaths within the population. This is particularly relevant to deaths occurring prior to the introduction of the Pathway Accommodation and Support System recording system in 2011.

The median age at death of a homeless person in the Dublin Region over this period was 42 years old. The median age at death of homeless women in the current study is 37 years old. The median age at death of homeless men in the current study is 44 years old.

Recognising that the current data represents a minimum is imperative. Homelessness is a serious public health concern.

The standardised mortality ratios (SMRs) are calculated for the years in which a denominator is available (i.e. the number of all people accessing DRHE accommodation in a given year). Thus SMRs for 2011, 2012, 2013, 2014 and 2015 for male and female homeless persons have been calculated in this study. This study found the SMR for homeless men was between 3 and almost 10 times higher compared to Dublin males in the general population. The SMR for homeless women was 6 to 10 times higher than Dublin women in the general population.

Cause of death was also examined utilising death certificates and coroner's records. Drug and alcohol intoxication was the most common cause of death amongst the homeless population, accounting for 39.9% of deaths where cause of death is known. Homeless persons in the current study were more likely to die by overdose than the general population, with opioids accounting for the majority of drug related deaths.

Both the Coroner's Office and the hospices have an important consultative role to play in the recording and reporting of homeless deaths and any proposed reform should include both as key stakeholders; others include addiction services, mental health services, prison services and hospitals.

BACKGROUND TO THE STUDY

There is a lack of definitive published information about the exact number of homeless people who die in the Dublin Region each year. Likewise, there is a lack of definitive information on the cause of death amongst this population. In an effort to address this dearth, the Dublin Region Homeless Executive (DRHE) and the Health Service Executive (HSE) funded this study to investigate mortality rates among the homeless population in the Dublin Region for the period 2005-2015. The study drew on several data sources to identify and verify deaths to determine and measure the death rate of homeless people accessing homeless services in the region.

Dublin Region Homeless Executive (DRHE)

The DRHE (formerly the Homeless Agency), in conjunction with the Health Service Executive (HSE), allocate state funding to homeless service providers in the Dublin Region to deliver services in line with the evidence informed model of service provision outlined in the DRHE's implementation plan, *Pathway to Home* (2009). In 2010, the DRHE developed 'PASS', a shared database that captures information on all service users accessing a range of homeless services. As it is a shared database, data are captured centrally on service users regardless of how many different services they access in the region. In the Dublin Region, over 90% of emergency beds are provided by services utilising PASS. However, service users frequently move between these services and other services using PASS so over time data are captured on most service users in the region.

Defining 'homelessness' in the Dublin Region

Determining who is homeless can be a contentious issue.[1,2] Without identification of clear parameters that enable classification within agreed frameworks, the opportunity for comprehensive analysis and comparative review of research is minimised. With this in mind, the Dublin Region Homeless Executive (DRHE) developed parameters that provide clear guidance about defining who is experiencing homelessness in the region and how long they are deemed to be a service user.

Several frameworks have been developed to categorise and conceptualise homelessness. However, a useful global definition identifies three distinct categories:[3]

1. People without accommodation (e.g., rough sleeping)
2. People living in temporary or crisis accommodation
3. People living in severely substandard or highly insecure accommodation

Busch-Geertsema et al's review of international data collection systems[2] reveals that systems are typically developed that focus solely on category two, those in shelters,

while those who are 'unsheltered' (category one) are not easily tracked therefore not included in many counts. The homeless services that are supported by the DRHE and utilise PASS capture information on the first two categories; those engaged in rough sleeping and those accessing emergency accommodation. In addition to the provision of emergency accommodation through Central Placements Services in each of the four Local Authorities in the Dublin Region and a 24 hour Free-Phone service, a Housing First Intake Team operates an outreach service every night that engages with individuals rough sleeping and all data is captured on PASS.

Inclusion of the third category of homelessness, sub-standard or insecure accommodation, has been regarded as "the most contentious aspect" of developing any single definition of homelessness globally. There are difficulties in definition and with methods of measurement and it is beyond the scope of a shared services database to collect this information in the Dublin Region.

Another critical element that was considered by the DRHE was determining how long a person should be considered to be homeless. While the vast majority of homeless service users transition through services on to tenancies[4,5] there are others who engage with services over lengthy periods of time, often episodically. As these individuals can often be those with greatest support needs, it was imperative that the system be designed to track persons who re-present frequently without seeking to set up a new record each time. Given this, a person's record is only purged from the database once they have not engaged with services for a period of two years; thereafter, these people are no longer considered homeless by the DRHE.

Homeless figures in the Dublin Region

Prior to the introduction of PASS there was no single agreed method of enumerating the homeless population but following the national roll-out of PASS to all regions in 2013, monthly figures have been issued by the Department of Environment, Community and Local Government. There were 4,152 adults accessing homeless accommodation during the week of June 20th to 26th, 2016. Sixty nine per cent (or 2,871) of these were located in the Dublin Region. There were also 2,206 children accompanying adults of which 1,894 (or 86%) were in the Dublin Region. In addition, there are typically in excess of 150 persons engaged in rough sleeping nightly during the week.

Capturing mortality data in the Dublin Region

In 2005, a formal Death Policy Notification was developed and approved by the Homeless Agency Board and Consultative Forum. The Policy applied to the death of any service

user within (or in contact with) homeless services of any description within the Dublin City, Fingal, South Dublin or Dún Laoghaire–Rathdown County Council areas, including service users who may have been in contact with a service while sleeping rough in the Region. The notification procedure was communicated to all Directors and Service Managers of homeless services in the region.

Following the introduction of PASS, procedures were modified to include a standardised template that needed to be submitted to the DRHE and the date of death was consequently noted on the PASS system, which facilitated a more comprehensive tracking of numbers relative to the on-going enumerated homeless population in the region. Therefore, while data relating to deaths have been captured since 2005, it is only since 2011 that the number of deaths could be linked to the number of persons accessing homeless services in the region, giving us both a numerator and denominator.

Limitations of PASS in the context of this study

PASS is restricted to persons who access emergency accommodation or are in contact with the rough sleeping outreach/intake team workers who are funded by the state. It does not include persons who exclusively use services that do not receive relevant state funding, but by international standards, it is unique in its ability to capture extensive and comprehensive data.

LITERATURE

Introduction

Homelessness is a major public health concern for service providers and policymakers,[6, 7] but mostly for homeless individuals and their families.

Homelessness and Health

The majority of people who experience homelessness do so for a short time, months as opposed to years, 'transitioning' through services to resolve their housing issue quickly.[8–11] The literature refers to those who experience homelessness in the longer-term as belonging to two categories of homeless. First are those sometimes referred to as the 'chronically homeless' [2] or having 'long-stays' in homeless accommodation[4] while the second group are more likely to engage in 'episodic' use of services. Dublin has a higher rate of individuals with long-stay and episodic service use when compared to other counties in Ireland.[13] More than 60% (2,375) of homeless individuals enumerated in the 2011 Census night were in the Dublin region; the next largest region was the South East (403). However, Ireland is comparable to places such as New York, Philadelphia and Denmark with approximately 80% of service users transitioning through services while the remainder are categorized as being episodic or long-stay service users.[14, 15] Exceptions to this trend have been reported by some Canadian cities, with between 85% and 94% of service users transitioning through services[4, 16, 17] although the reasons for this have not been fully explored yet.

Homelessness is particularly harsh[18] on an individual's physical and psychological health. According to the 2011 Census report, one third of the homeless population reported having fair, bad or very bad general health; the corresponding figure for the general population was 10%. Moreover, 42% of homeless individuals had a disability, a stark contrast to the percentage of 13% reported in the general population.[13] The longer a person is homeless, the more likely it is that they will suffer from a medical condition. Chronically homeless individuals are far more likely to experience greater rates of chronic disease, and mental illness.[7, 18–24]

In addition, homeless persons experience excessive rates of addiction compared to the general population.[18, 21, 25] The latest report from the National Drug Treatment Reporting System (NDTRS) in 2015 produced figures for 2013. According to this report, 7399 people received treatment for problem alcohol use in Ireland. The proportion of all cases that were homeless in 2013 was 5.7%. Previously treated cases were more likely to be homeless when compared to new cases.[26] However, this is likely to be underestimated as validation of individuals in service is done only at initiation of treatment and not completed for everyone.

Addiction is frequently a contributory reason for, or a result of, homelessness.[27] An examination of the rates of mortality amongst homeless populations regularly cites drug and alcohol use as leading causes or underlying factors in the cause of death.[28–32] According to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) Ireland is ahead of other European countries when it comes to reporting drug-related deaths[33] and the specific substances implicated in these deaths. Several countries fail to report substance-specific data and importantly fail to separate drug-related from alcohol-related deaths.[34]

Homelessness: Morbidity and Mortality

Homeless persons suffer from a high prevalence of physical disease, mental illness, and substance abuse.[35, 36] Homelessness is associated with an increased rate of infections such as tuberculosis and human immunodeficiency virus (HIV) disease.[37–40] Among the homeless, access to health care is often suboptimal.[35, 36, 41–43] Homeless persons also experience severe poverty and often come from disadvantaged minorities, factors that are independently associated with poor health.[44] Thus, suggestions that mortality among homeless populations is much higher than in the general population are not surprising.

Studies of mortality amongst homeless people, mainly in the United States,[45–51] Canada[35, 52–54] and Europe[55–61] carried out over the past 20 years found that mortality rates among the homeless varied from 3 to 13 times higher than rates in the general population. While the causes of deaths vary widely from study to study, the leading causes were cancers, cardiovascular diseases, accidents, intoxication and suicides. While these are similar to causes of death in the general population they occur at very different rates. For example, despite the low prevalence of head and neck cancer in the general population, homeless people disproportionately suffer and die from head and neck cancers.[62–64] Similarly homicide and intoxication are among the leading causes of death in homeless populations,[35, 46, 65, 66] although they account for a minority of deaths nationally (CSO, 2013) and internationally (WHO, 2012). As homeless people age the leading causes of death change. In a recent study Baggett et al (2013a) examined shifts in causes of death amongst homeless individuals over a 15-year period in the US. The authors found homicide was the leading cause of death among men who were 18 to 24 years of age (mortality rate, 242.7 per 100,000 person-years; rate ratio, 4.1). Acquired immunodeficiency syndrome was the major cause of death in men (mortality rate, 336.5 per 100,000 person-years; rate ratio, 2.0) and women (mortality rate, 116.0 per 100,000 person-years; rate ratio, 5.0) who were 25 to 44 years of age. Heart disease and cancer were the leading causes of death in persons who were 45 to 64 years of age.[48]

Before the present study, the number of deaths in homeless people occurring each year as well as the causes of death in Ireland had never been collated. Crude mortality amongst the homeless is greater in males than in females; however, mortality is much higher among homeless women under age 45 years than among older homeless women, moreover, mortality rates among younger homeless women often approach or equal those of younger homeless men.[35, 67] There is a consensus within the literature that homeless deaths are significantly underestimated.[68, 69] Several studies identified the need to understand homeless mortality better, particularly the leading causes of death, in order to manage this issue and to implement effective strategies to decrease the number of homeless deaths.[68]

Calculated mortality rates

The body of research that examined mortality rates in homeless populations is small. The majority of studies have been conducted in North America.[45–47, 65, 70] Fewer have been carried out in Europe.[71–73] Of the available studies some calculated Standardised Mortality Ratios and some relied on Crude Mortality Rates or were limited to specific populations i.e. male only or substance users. No studies have attempted to calculate standardised mortality ratios in Ireland or to document causes of death.

Summary

Despite the persistence of homelessness in Ireland[36, 74, 75] and internationally[31, 45, 76–78] the past decade has yielded few studies on mortality among homeless persons, and information on causes of death in this population is sparse. Of the available studies, the data are quite dated and often lack information about exact cause of death.[77]

METHODS

Aim of Study

The aims of the current study are twofold (i) to calculate mortality amongst the homeless population in Dublin (ii) to describe the leading causes of deaths amongst this population.

Study Objectives

The objectives of this study are:

I.   To review existing literature on mortality in homeless populations

II.   To validate records of deaths in the homeless population from a number of sources and to construct a single database of deaths in the homeless population in the Dublin region from 2005 to 2015

III.   To measure the mortality of the homeless population in the Dublin region between 2005–2015.

IV.   To make recommendations on how to collect data in the future.

V.   To make recommendations on taking a national approach to recording and reporting mortality amongst homeless persons in Ireland.

Study Design

The study is a retrospective record study carried out in homeless services supported by the Dublin Region Homeless Executive. The study period was 2005 to 2015. Deaths of people between 2005 and 2015 who had accessed homeless services supported by the DRHE were reviewed in a three-phase review process as follows:

Phase 1 – (Validation): consisted of building a dataset based on the death notifications maintained by DRHE (n=337). These data were used to view a death certificate in the General Register Office (GRO). The GRO hold records of all births, deaths and marriages registered in Ireland. Following a written request the research team was granted access to electronic records. The purpose of this was twofold (i) confirm the death and (ii) obtain a cause of death. The research team also used the records at the Dublin City Coroner's office to validate deaths of cases with outstanding inquests. At the end of phase 1; 284 of the 337 (84%) were validated and a cause of death was recorded for 256 cases. The remaining 28 had an outstanding inquest. Thus, cause of death was not possible to ascertain for these cases.

Phase 2 – (Audit): consisted of meeting with a number of key agencies that had reported deaths to DRHE during the study period (all services included except services no longer in existence or older services that no longer receive DRHE funding support. In some

instances, the service provider name changed during the research period, e.g., former local authority services that were contracted to a service provider but these providers were already included in the list). During site visits, it became apparent that agencies reported and maintained records of deaths of service users differently across the sector. Some agencies reported only the death of a service user who died in their service; others reported the death of a service user who died in another agency but who was also accessing their services at the time, while other agencies reported the death of a known homeless person. In the effort to compile as comprehensive a picture as possible, we decided to conduct an audit of records. As such all agencies included in the study were requested to return a copy of the death records of service users who had died between 2005 and 2015. In addition, it was decided that the research team would meet with two hospice services that were named as the place of death on a number of death notifications. These two services also took part in the audit.

Phase 3 – Reconciliation: consisted of crosschecking the Audit figures and names against the DRHE death notifications. All eligible 59 cases were validated (as per phase 1) and included in the dataset. The results of these three phases are summarised in figure 1.

Figure 1: Breakdown of cases included in study across data sources
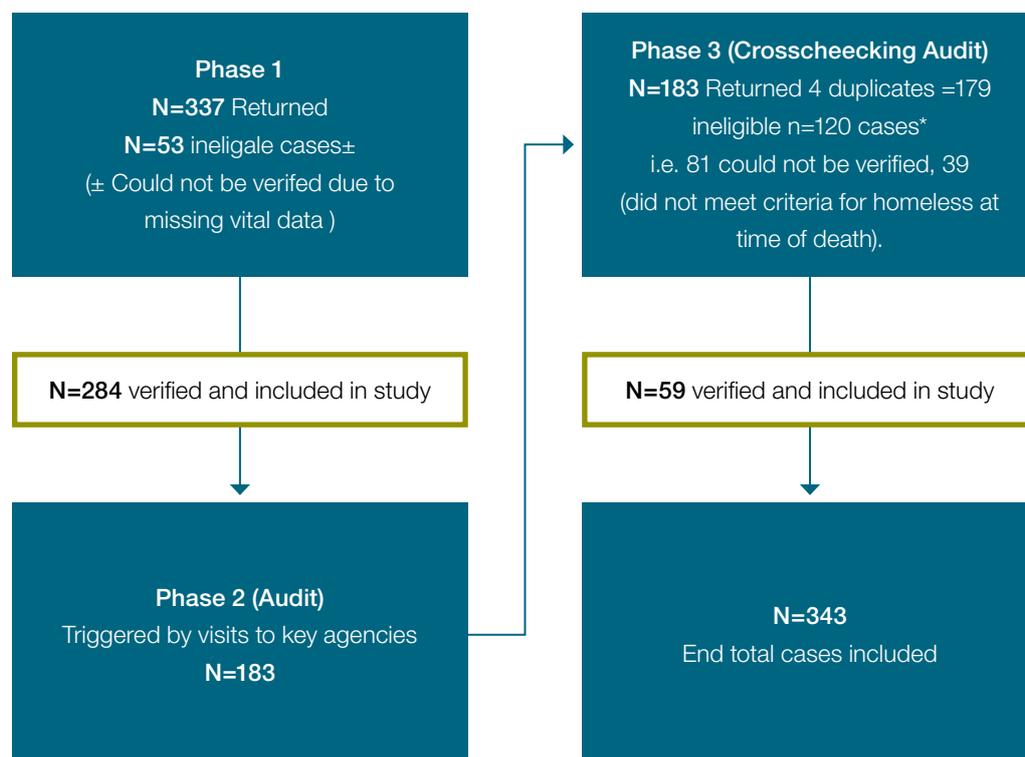
The principal objective was to measure mortality in the homeless population of Dublin. Initial inspection of the data suggested that there were approximately 30 deaths per annum of homeless people in Dublin for the period 2005 to 2015. Because of these numbers, it was decided to calculate standardised mortality ratios (SMRs) for each year possible, as the index of mortality. Calculating SMRs would mean that objective three would be met, and the methodological issues and challenges that would arise in calculating SMRs would inform recommendations for objective four. To calculate the SMR for any given year, four sets of data were required.

(1) Age and gender distribution of the homeless population in Dublin (denominator data in index population).

(2) The number of deaths in the same homeless population (numerator data in index population).

(3) Age and gender distribution of the total population of Dublin (denominator data in the standard population).

(4) Five year age and gender specific deaths in Dublin (numerator data in the standard population)

When calculating mortality rates with an unknown date of birth the unknown dates of birth were distributed in the same proportions as occurred in the known dates of birth.

Up to and including 2010 the homeless denominator was incomplete. Thus, SMRs were calculated for the years 2011 to 2015 inclusive.

Denominator data in the index population

The denominator data included age and gender distribution of the homeless population in Dublin (denominator data in index population). These data were provided by the Dublin Region Homeless Executive (DRHE) from 2011 onwards. The extent of data available for each year for which an SMR has been calculated is given in Table 1. The DRHE introduced a new method of counting homeless people in 2011. The PASS system is an online system that produces essential information about managing individual access to accommodation. PASS provides live information about homeless presentations and bed occupancy within the Dublin area. The introduction of the PASS system has led to greater efficiency and an improved approach to collecting essential data on both presentation and service utilisation in the homeless services.

Table 1: PASS Denominator Data for Homeless Population 2011-2015

Classification by Age Group & by Gender. PASS Data Only.	2011		2012		2013		2014		2015	
Gender	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
18–24	386	249	440	262	521	313	512	395	456	480
25–44	1,488	476	1,729	595	1,959	747	2,092	1,027	2,121	1,328
45–64	461	77	522	105	643	150	694	200	768	243
65+	34	6	42	8	45	12	42	15	53	22
Missing age/Purged on PASS	1,232	369	875	286	153	62			1	9
Total All Ages	3,601	1,177	3,608	1,256	3,321	1,284	3,340	1,637	3,399	2,082

Numerator data in the index population

The numerator data consisted of the number of deaths in the same homeless population. Since 2005, all services supported by the DRHE are required to return details of a death of a service user. All notifications are sent by email and/or fax to a nominated staff member at the DRHE office. The study period relates to death notifications from 2005 to 2015 inclusive. The verified numbers of deaths in homeless individuals for each year from 2011 to 2015 are given in table 2. Of the 343 deaths in homeless people between 2005–2015, 201 occurred between 2011 and 2015.

Table 2: Numerator Data Deaths In Homeless population 2011-2015

Classification by Age Group & by Gender. PASS Data Only.	2011		2012		2013		2014		2015	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
18-24	2	0	1	0	5	1	3	0	2	0
25-44	6	2	11	5	10	6	14	10	26	6
45-64	4	1	12	2	8	0	13	1	19	3
65+	1	1	2	1	3	2	4	1	4	0
Missing ages	0	0	0	0	0	0	3	0	3	3
Total All Ages	13	4	26	8	26	9	37	12	54	12

Denominator data in the general population

We acquired age and gender census data for Dublin for the Census years 2006 and 2011 from the Central Statistics Office (CSO). In addition, we acquired the same data for the inter-censal years.[a] No inter-censal data were available for 2015. Table 3 outlines summary data on the population of Dublin.

Table 3: Denominator Data for General Population 2011-2015 by age and gender

	2011		2012		2013		2014		2015	
Age	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
18–24	63,711	67,234	54,917	56,078	50,903	48,749	48,472	44,755	47,109	44,691
25–44	218,986	225,914	215,490	227,467	216,450	227,647	171,245	229,773	224,521	230,448
45–64	130,529	140,161	131,813	140,808	133,881	142,285	183,566	1,442,235	138,373	148,366
65+	59,804	79,472	61,878	81,308	64,421	83,548	66,966	86,149	69,719	88,336
Total All Ages	473,030	512,781	464,098	505,661	465,655	502,229	470,249	504,912	479,722	511,841

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a   Inter-censal estimates are produced for each non-census year by adjusting the existing time series of post-censal annual estimates to smooth the transition from one census count to the next. As census data is produced in 5-year age bands, beginning with 15–19 and the current study was only concerned with an adult population, we made a special request and acquired single year census and inter-censal data for age 18–19 years for 2005–2015 from the CSO.

Numerator data in the general population

Mortality data by 5-year age bands and gender for the years 2005 to 2015 inclusive was supplied by the CSO; see Table 4 below.

Table 4: Numerator Data in the General Population 2011-2015

Deaths in General Population County Dublin By Gender & Age Group 2005-2015

Gender	Age Group	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Male	18–24	64	64	55	55	59	47	45	26	35	38	19
	25–44	253	257	245	283	285	228	246	262	196	189	172
	45–64	658	706	753	704	708	738	717	749	693	702	551
	65+	2,396	2,413	2,422	2,395	2,505	2,491	2,555	2,662	2,597	2,716	2,429
Male Total		**3,371**	**3,440**	**3,475**	**3,437**	**3,557**	**3,504**	**3,563**	**3,699**	**3,521**	**3,645**	**3,171**
Female	18–24	23	16	12	17	7	11	12	10	12	10	5
	25–44	106	133	140	114	123	129	113	129	114	128	84
	45–64	487	496	476	511	518	469	495	487	490	450	398
	65+	3,061	2,971	3,046	3,047	3,008	3,047	3,154	3,178	3,323	3,244	3,153
Female Total		**3,677**	**3,616**	**3,674**	**3,689**	**3,656**	**3,656**	**3,774**	**3,804**	**3,939**	**3,832**	**3,640**
Grand Total		**7,048**	**7,056**	**7,149**	**7,126**	**7,213**	**7,160**	**7,337**	**7,503**	**7,460**	**7,577**	**6,811**

Inclusion criteria

Service users 18 years of age and over, accessing DRHE supported services in the Dublin region and known to have died between 2005 and 2015, were included in the study.

Data sources/measurement

Data sources differed considerably in some cases. The DRHE records consisted mostly of death notifications recorded on a standardised form. However, not all reporting agencies completed the form and some furnished an email or facsimile outlining details of the death. Service provider records included usual service user files as well as informal sources, such as a list of names for the remembrance ceremony. All data were used to extract name, date of birth, date of death and place of death. This was the minimal data required to obtain a death certificate and confirm the death.

Calculating a Standardised Mortality Ratio (SMR)

The following steps were taken to calculate the SMR, for males and females separately:

1. Calculate mortality rate in the general population as: number of deaths divided by population per 5 year age band
2. Calculate expected number of deaths among homeless as: mortality rate in general population, multiplied by number of homeless people per 5 year age band
3. Calculate actual number of deaths among the homeless
4. Calculate SMR as: actual number of deaths/ expected number of deaths

Verification of Cause of Death

All death certificates of people who had an inquest (337) were examined and cause of death was taken from these certificates.

Ethical Approval

The study received ethical approval by Ethics Committee at the Faculty of Health Sciences, Trinity College Dublin.

Chapter 4

RESULTS

Chapter 4   Results

The end total of deaths included in the current study was 343. More than three quarters (76.7%) were male (n=263). The median age at death was 42 years old, for males this was 44 years old and 37 years old for females.

Table 5: Verified deaths in the homeless population in Dublin 2005-2015 by age and gender

| | Pre PASS 2005–2010 | | | | | | Post PASS 2011–2015 | | | | | |
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Male	16	22	29	14	11	15	13	26	26	37	54	**263**
Female	8	7	8	6	4	2	4	8	9	12	12	**80**
Total	24	29	37	20	15	17	17	34	35	49	66	343

Note: please note age categories 45–64 and 65+ have been collapsed in the current table due to small numbers and thus, potentially, identifiable deaths.

The majority of homeless people in the current study died in hospital or in a homeless service. Less than 10% of people died outdoors.

Table 6: Place where homeless death occurred

| | Pre PASS Data | Post PASS Data | |
	2005–2010	2011–2015	Total
Hospital	75	100	**175 (51%)**
Outdoors	7	22	**29 (8.4%)**
Hospice	3	8	**11 (3.2%)**
Prison	0	1	**1 (0.2%)**
Private residence	15	10	**25 (7.2)**
Homeless Services	42	60	**104 (30.0%)**
Total	142	201	343

Standardised Mortality Ratios

Standardised mortality ratios (SMRs) for 2011, 2012, 2013 2014 and 2015 for male and female homeless persons are given in Table 7. SMRs were between 3 and almost 10 times higher in homeless men compared to Dublin males in the general population. For homeless women the SMRs ranged from 6 to 10 times higher than Dublin women in the general population. SMRs could not be calculated for the years 2005 to 2010 because the denominator (census) data for the homeless population were not available.

Table 7: Standardised Mortality Ratios 2011–2015

Year	Males			Females		
	Observed*	Expected±	SMR	Observed	Expected	SMR
2011	13	4.9	2.7	4	0.65	6.2
2012	26	5.8	4.5	8	0.8	10.0
2013	26	6.1	4.3	9	1.0	9.0
2014	37	6.4	5.8	12	1.3	9.2
2015	54	5.4	10.0	12	1.3	9.2

* Number of observed deaths in the homeless population
± Number of expected deaths (calculate expected number of deaths among homeless as: mortality rate in general pop multiplied by the number of homeless people per age group)

Table 8: Cause of death by year

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Drug and Alcohol[b]	12	14	14	13	6	3	7	9	14	18	27	**137**
Circulatory'	3	6	4	2	3	5	1	7	6	11	5	**53**
Respiratory	3	2	7	3	2	4	2	5	6	7	6	**47**
Gastrointestinal	2	0	1	1	1	0	1	5	2	3	3	**19**
Unnatural	3	6	3	1	1	2	1	3	2	4	9	**35**
Cancer	0	0	2	0	0	1	2	1	2	3	2	**13**
Other	1	1	6	0	2	2	3	4	3	3	8	**33**
Outstanding Inquest	0	0	0	0	0	0	0	0	0	0	6	**6**
Total	24	29	37	20	15	17	17	34	35	49	66	343

The causes of death for homeless individuals vary from those of the general population. Whereas circulatory diseases and cancer account for about 2/3 of deaths amongst the general population, in homeless individuals these two disease categories combined only account for 20% of deaths where deaths are known (Table 8).

b Drug and alcohol as a direct cause of death represent a minimum. Drug and alcohol figures in table 8 refer to 'disease or condition leading directly to death' in a further 60 cases (17.8%) deaths drug and alcohol was an 'antecedent or significant factor, which contributed to the death see table 9. In addition, some inquests were outstanding.

In 40% (137/343) of cases drugs and or alcohol were the certified cause of death. In addition, in a further 60 cases alcohol and drugs are implicated. Thus, in 57% (197/343 of all deaths drugs and or alcohol were implicated. The breakdown of drug and alcohol deaths is given in table 9.

Table 9: Drug and Alcohol Related Deaths Amongst the Homeless Population in Dublin

	Pre PASS	Post PASS	
	2005–2010	2011–2015	Total
Drugs	43	71	**114**
Alcohol	10	2	**12**
Both Drugs and Alcohol	9	2	**11**
Total	62	75	137
Deaths were drugs was antecedent	17	43	**60**
Total	**79**	**118**	197

Chapter 5

DISCUSSION

Key results

Despite improvements in the health of the general population in Ireland over the last three decades, the median age at death for homeless people remains young at just 42 years old, with the median age at death for homeless women being even lower at 37. The study found the SMR for homeless men was between 3 and almost 10 times higher compared to Dublin males in the general population. The SMR for homeless women was 6 to 10 times higher than Dublin women in the general population.

The leading cause of death was ascribed to drugs and or alcohol. More homeless people die as a result of substance use than circulatory disease and cancer combined.

The majority of homeless people in the current study died in hospital or in a homeless service. Less than 10% of people died outdoors, a low figure in comparison to the figures reported in the international literature.[68, 79]

The study received support from all participating agencies. All of the agencies that were contacted took part in the study. The Audit cycle proved to be quite simple and effective. The findings highlighted several discrepancies in reported deaths throughout the recording system. It highlighted the need for agencies reporting a death to the DRHE to improve current reporting practices. In addition, the PASS system emerged as highly effective in recording the daily activity of service users and offers consistency regarding homeless status individuals in the region. However, of the additional names included from the Audit (n=59) several service user records had not been removed from PASS as no notification had been received. Similarly, in a number of cases service users had a date of death on PASS although no death notification had been sent to DRHE as per protocol.

The addition of 59 additional deaths picked up from the Audit shows a discrepancy of 17% between numbers returned to DRHE immediately after death occurred and records held by agencies. Such a discrepancy suggests that the current reporting system is in need of review.

Limitations

The current study data had a number of limitations that must be acknowledged. Several of the reported deaths in the current study were unverifiable. One reason was that a number of individuals in question were using an alias, a not uncommon practice. Record keeping varied significantly between agencies and several discrepancies existed between agency records and deaths reported to the DRHE. The study period covered 11 years; data protection guidelines recommend not keeping records indefinitely and therefore not all data were available. Also, not all agencies that reported deaths in phase 1 data collection were included in the Audit as they were not a service in receipt of DRHE funding support or the service was no longer in existence.

RECOMMENDATIONS

Chapter 6 Recommendations

Based on the findings of the report the following recommendations are made:

1. Reform of current data capturing practices

It is apparent from the findings that all deaths of homeless persons are not captured through the current death notification protocol in the Dublin Region as it is limited to deaths occurring in services or the deaths of service users who depart emergency accommodation to go to hospital/hospice. It is recommended that an annual audit, similar to that undertaken during this research, be undertaken to capture additional data relating to persons who are active services users (i.e., had an active record on PASS) who are known to have died although they may not have been accessing services at the time of their death. Adequate review and quality assurance systems should also be developed to ensure all death notifications contain basic information such as 'any known alias' in addition to full name, date of birth, date of death and place of death. This will assist with any possible death certificate searches. Also, the Policy of the Death of a service user in the Homeless Sector in Dublin (2012) should be updated to align to the HSE Safety Incident Management Policy (2014) and HSE Safeguarding Vulnerable Adults Policy (2014).

2. Annual report of deaths occurring in homeless persons

The Dublin Region Homeless Executive should produce an annual report of deaths occurring in homeless persons. The report should include a numerator and a denominator allowing for the production of standardised mortality ratios once general population data becomes available. Information should include the HSE minimum data sets required (HSE Safety Incident Management Policy 2014) on an Incident Reporting Form with basic demographic information, breakdown of where deaths occurred and, where possible, categories of cause of death. However, should resources permit the records of reported homeless deaths should be validated against death records at the General Register Office.

3. National reports

The system of recording and reporting deaths should be rolled out nationally to the other eight local authority based regions[c] so data relating to all deaths in the state are available and national standardised mortality ratios can be produced.

4. Explore the establishment of a group or committee to:

- investigate how the local authority based regions' reports[d] can be used most effectively to inform policy, configure appropriate health and homeless services and improve health responses for homeless persons, and

- work towards an agreed definition of homelessness across sectors to facilitate greater comparability of research and more consistency in data collection and reporting methods.

Representatives from key stakeholders groups should come together including but not limited to homelessness, addiction and mental health services, coroner's office, hospice services, hospitals, and prison services.

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c   The 31 local authorities in the state are grouped into nine regions. Each region has a lead local authority responsible for the development and delivery of an action plan for the region. Dublin City Council is the lead local authority for the Dublin Region and action plan for the area is delivered and monitored through a Statutory Management group and Joint Homeless Consultative Forum on which all other local authorities in the region are represented alongside relevant statutory and NGO representatives

d   The lead local authorities for homelessness in each region provide monthly reports on homelessness and detailed quarterly protocol reports to the Department of Housing, Planning and Local Government, which outline the number, and manner in which people are engaging with a range of prevention and placement services.

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Notes

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