Table 1 – Table describing characteristics of each study with regards to the type of institution, nature and size of the population, methods, type of disability and type of abuse

Study/ Countryof origin	Setting	Sample size and population group (n)	Methods / Type of study	Type of disability (Old age related / intellectual disability/ physical disability)	Type of abuse
Bužgová (22) Czech Republic	Twelve residential homes	Elderly clients (n = 488) and direct care staff (n = 454)	Questionnaire and interview of both, clients and staff	Old age related	Physical, sexual, psychological, deprivation of rights, financial exploitation
Cambridge(36) UK	Inpatient services	Clients (n=2)	Detailed case reviews an investigation into the abuse of two clients by staff	Intellectual disability	Physical, neglect, financial
Connor et al (26) USA	Long term care setting for elderly persons	Relatives or adults responsible for elderly persons in long term care (n=1,002)	l elephone survey of behaviour of staff	Old age related	Physical, deprivation of rights, neglect
Fureyet al (19) USA	Cases in Connecticut, United States of America	Substantiated cases of abuse against adults with intellectual disability (n=168)	Case file analysis	Intellectual disability	Sexual, neglect
Goergen (31) Germany	Eight nursing homes for the elderly	Members of staff (managers, owners, staff at all levels of qualification and volunteer workers) (n=80)	Questionnaire survey of nursing home staff Qualitative interviews with a random selection of staff Analysis of cases of elder abuse	Old age related	Physical, sexual, psychological, neglect and financial
Hussein et al (33) UK	England and Wales	Referrals of care staft dismissed for abuse or misconduct of vulnerable adults (n=5294)	Analysis was carried out on the 5294 records of staff with more detailed analysis carried out on a sample of 298 referrals	All groups	All forms of abuse
Mansell (1) UK	I wo local authorities in South- East England	Adult protection referrals (n=6148)	Referral analysis of data on both clients and staff	All disability groups	All forms of abuse
Marchetti & McCartney (23) USA	Public residential facilities	Cases of confirmed abuse of persons with intellectual disabilities (n=55)	Analysis of case reports for data on the victims, perpetrators and type of abuse and comparison with the characteristics of the overall population of residents and staff in four facilities	Intellectual disabilities	Physical, verbal, sexual and neglect

McCartney (27)	Public residential	Confirmed cases of abuse	Report analysis	Intellectual disabilities	Physical, sexual,
USA	facilities in six Southern states	over a twenty month period of people with intellectual disabilities (n= 494)	Comparison between abused and non- abused clients and between abusing and non-abusing staff		psychological, deprivation of rights, neglect and financial
Mercer et al (38) USA	Three nursing homes	Nurse's aides (n=27)	Staft interviews on the topics of perceptions of training, workloads, racism and abuse	Old age related	Physical, psychological
Natan et al (20) Israel	24 long-term facilities for the elderly	Staff working at long-term facilities for the elderly (n=510)	600 questionnaires distributed to staff (510 returned) Sociodemographic data, details about the facilities Structured questionnaires 1. Iowa Dependant Adult Abuse Nursing Home Questionnaire Scale 2. Knowledge and Management of Abuse Scale 3. Maslach Burnout Inventory Human Services Survey	Old age related	All forms of abuse
Nosek (29) USA	Independent living centres	439 were women with and 421 without disabilities (n=860)	Questionnaire to clients Comparison between women with and without disabilities	Women with disabilities	Physical, sexual
Pillemer and Moore (35) Pillemer and Moore (37) USA	Nursing homes	Members of staft (n=577)	Structured telephone interview relating to witnessed or perpetrated abuse against clients	Old age related	Physical and psychological
Roberto (25) USA	Fourteen lived in residential facilities	Confirmed cases of sexually abused men over four years from Adult Protection Services (n=17)	Questionnaires were completed by regional consultants based on information from the clients' case files	All groups	Sexual
Rusch (24) USA	Residential facility for people with intellectual disability	Substantiated cases of victims of abuse (n=80) vs randomly selected clients without abuse experiences (n=80)	Case file reviews	Intellectual disabilities	Physical
Shaw (32) USA	Nursing home	Staff (n=21)	Semi-structured interviews on coping with aggressive acts by clients	Old age related	Physical, psychological, deprivation of rights, neglect

Strand (34)	I hirteen group	Statt members	Staff Questionnaire included on violence	Intellectual disability	Physical
Sweden	dwellings in four day centres in one municipality	(n=164) working with 128 adults with intellectual disabilities	towards clients and staff over a period of one year		
Teaster (30) USA	Majority (72%) of clients residing in facilities	Cases reported and screened for investigation concerning alleged sexual abuse of older persons who were 60 years or older and (n=82)	Files from Data Adult Protection Services over a period of 5 years from July 1, 1996 to June 30, 2001 in the common wealth of Virginia	Old age related	Sexual violence
Turk (18) UK	Adults with intellectual disability within a large regional health authority	New cases of victims of sexual abuse over two year period (n=138)	Questionnaires sent to all the main statutory providers of services for adults with intellectual disabilities, 138 returned	Intellectual disability	Sexual violence
Zemp (21) Germany	Nine institutions in different geographical areas	130 men and 130 women with disabilities (n=260)	Questionnaires and interviews with victims Individuals were not excluded due to the severity of their disability; if necessary dolls and simple yes / no answers were used to aid communication	Multiple disabilities, including intellectual disabilities	Sexual
Zırpolı et al (28) USA	Residential facilities in the USA	Persons with intellectual disability (n=91) who were victims of abuse by their residential caregivers (57/91 male) compared with randomly selected clients (n=91) from the same facilities who were not known to be victims of abuse (53/91 male), 1980 - 85	Scales administered to the primary educator: Behaviour Development Survey (shortened version of the American Association on Mental Deficiency Adaptive Behaviour Scale) rating adaptive and maladaptive behaviours	Intellectual disability	Physical, psychological

Table 2 - Table summarising the factors identified as risk factors for institutional abuse

Category	Risk factors for abuse
Victim characteristic s	Gender - female 72% to 73% of adult intellectually disabled victims of sexual abuse were female in (18) (19) Overrepresentation of females in abused elderly for all types of abuse (20) (22) 64% of females (vs. 50% of males) with physical and/or mental disabilities have been sexually exploited (21)
	Age 21-30 years in intellectually-disabled clients (18) Middle and older age for sexually inappropriate conversation (25) Positive correlation with abuse only if associated with cognitive impairment (26)
	Dementia and cognitive decline Particularly when associated with challenging behaviour (26)
	Intellectual disability Within samples of intellectually disabled clients (different types of abuse) between 70 and 80% were severely or profoundly intellectually disabled (24) (27) (28)
	Physical disability Between 49 and 70% of abused population had physical impairments (18) (24) (30) Specific issues: Impaired ambulation, immobility, loss of hearing, loss of vision, requiring physical, mechanical or personal assistance, incontinence (32)
	Challenging Behaviours High rates of challenging behaviour in abused samples (elderly, intellectual disability): 41 – 66% (18) (24) (27) Correlation between a range of maladaptive behaviours and being abused
	Other No family or other regular visitors (22) (32) History of abuse within the previous 12 months (28% against 10% in the non-abused group) in patients with intellectual disability (27)

Staff characteristics	Gender - male Overrepresentation of men 31- 41% of abusers male (27) (33) Males commit more abuse compared to females in working with intellectually disabled clients (18) (23) (27)
	Age Mean age of 35.13 in abusers of patients with intellectual disability compared to 34.85 in randomly selected carer group (27) Older staff aged fifty or more - odds ratios of 1.35 for physical, 4.05 for sexual abuse respectively (33) Younger staff more likely to financially and psychologically abuse (33) (35)
	Role / function – Frontline direct care staff
	Qualification and training – lower qualification, untrained Lack of professional skills to recognise and report abuse (36)
	Personality Dominant, authoritative (22) (37) Lack of empathy (31) Lack of ambition (20) Wanting to vent their rage (31) Seeing clients as children (37) Being abusive towards staff (36) Previously perpetrating abuse (27) Substance abuse (32) History of involvement of domestic abuse (32)
	W orking conditions Experience of stress (22) Poor working conditions (32) Burnout, overworking (22) (32) (37) Working when physically unwell (32) Absence of sick leave (32) Having to get job done quickly (31) Not sufficiently motivated by managers (20) Dissatisfaction with work (22) Thinking of quitting (37)
	Personal stressors Stressful personal life situations – 49.2% of staff who reported that they committed acts of psychological abuse (37)

	Financial stressors Economic inequality Fatigue or physical exhaustion Carer's marital status, number of children, dysfunctional family situations Psychological stressors Having a 'nervous breakdown' Being psychologically disturbed Emotionally exhausted - Pearson correlation coefficient, r = 0.23, p<0.05 (31)
Characteristics of institutions	Organisations and Management Inward-looking culture and a punishing regime (36) Services resisting input and involvement of outside professionals Service isolated within the organisation (36) Reduced financial resources (31) Lack of scrutiny (36) Poor working conditions (36) (29)
	Organisational policy Lack of clear policies around abuse (23) Abuse receiving a low priority due to other pressures (36) Poor development, implementation and monitoring of interventions designed to reduce the frequency, severity or duration of challenging behaviour (36)
	Environment Abuse occurred in residential areas in 60%, during leisure in 29% and during personal hygiene in 16% of cases (27) Situations where the victim was the only person in a position to report the abuse (18) Situations that provide opportunity to abuse (19) Particular shifts when there is less monitoring (23) During bathing and dressing (38)
	Staff management Use of collision and intimidation by senior staff to bully juniors (36) Ineffective staff supervision (36) Lack of management and peer scrutiny during nights and in monitoring the provision of personal and intimate care (36)
	Training and guidance Lack of guidance to staff (36)

Newly appointed	staff members placed in difficult situations (36)
New staff encoura	ged to assault clients to control aggressive behaviours(36)