# (MANUAL HANDLING POLICY)

Load Management, Ergonomics, Patient Handling & Positioning

**Yeovil District Hospital NHS Foundation Trust** 

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Literature indicates that manual handling injuries are the most common type of work related conditions in the UK (Ariëns et al., 2001, Huang, Feuerstein and Sauter, 2002). According to the Health and Safety Executive (HSE, 2013/14), manual handling is a broad category of work-related injuries, which includes: harms due to carrying, lifting, pushing or pulling loads; sprains, strains; trapped fingers, fractures, falls and cuts from sharp objects. The HSE statistics (2013/14), reveal that 1.3 million of working people are suffering from a work-related illness, and overall 30% of the all injuries in the UK, are caused by manual handling. The National Patient Safety Agency (NPSA) (2012) statics shows that musculoskeletal conditions are accounting approximately 40% of all sickness absences and causing NHS almost £1 billion a year. Based on these statics in In 2015/16, an estimated 25.9 million working days were lost due to absenteeism linked to manual handling incidents, which was downward trend to around 2011/12, and recently the rate has been generally flat.

According to NHS manual handling guidelines work related accidents for some members of staff can result in long periods of sick leave, while for others it may even lead to the end of their career. There are different regulations that enforce all employers to commit to their legal responsibilities and ensure the health and safety of their staff at work as indicated by World Health Organization (WHO) (1999). The Health and Safety at Work Act, which was introduced in 1974, placed general obligations on employers and others to reduce the rate of manual handling incidents. Since then, a few other regulations have been introduced to manage the manual handling incidents (e.g. the Management of Health and Safety at Work Regulations

1999, Manual Handling Operations Regulations199), which have been reasonably effective according to HSE.

Although there were existing regulations and legislations regarding manual handling incidents in the UK, there was no specific manual handling policy for the NHS staff, except NHS manual handling guidelines. Therefore, the Yeovil District Hospital NHS Foundation Trust recognised the need for an internal robust manual handling policy, specifically developed to manage the work related injuries of their staff more efficiently. Yeovil District Hospital NHS Foundation Trust, runs Yeovil District Hospital in Yeovil, Somerset England, and provides acute care for a about 180,000 people. Each year the hospital admits around 30,000 inpatients and treats more than 90,000 people in the outpatient departments.

Based on the Health and Safety Policy's statement of intent, the Manual Handling Operations Regulations (2002) and the Risk Management Strategy as recommended by several authors including Hignett, (2003) and Baggott, (2011), who emphesised the correct management of manual handling injuries, Yeovil District Hospital had a legal responsibility to identify requirements concerning the risk managements of their staff for manual handling. This includes all aspects of moving and handling activities, ergonomics, patient handling and positioning (Smedley et al., 1997). Hence, to fulfil the required obligation, the policy group provided a comprehensive action plan for manual handling, load management and the high rate of manual handling incidents, Yeovil District Hospital NHS Trust, introduced the local health services manual handling policy.

The aim of this policy was to establish a detailed risk management strategy to be implemented within the Trust, in order to reduce the risk of injury to both staff and patients, and keep those risks at the lowest level so far as is realistically achievable. The manual handling policy intended to apply to all Yeovil District Hospital NHS Foundation Trust staff, both clinical and non-clinical, including bank/ temporary posts, volunteers and students working within the Trust. The policy had established well-defined and achievable objectives, however it dose not provide sufficient evidence and data on a few subjects (e.g. the prevalence of manual handling incidents in Yeovil District Hospital NHS Trust, prior to implementation of this policy, type of workplace injuries due to manual handling and ergonomics in Yeovil District Hospital). In addition, the policy did not provide appropriate information regarding the initial thoughts and how exactly they came up with this idea to develop this manual handling policy, while a few other regulations and legislations were already introduced. Alternatively, they could just implement the existing regulations or NHS manual handling guidelines and follow the HSE guidelines. Although no information has been provided, but apparently there have been some short falls and gaps in those guidelines, which led to developing this policy and achieving, desired goals, regarding common Occupational and handling injuries (Chaffin and Andersson, 2006).

This policy was proposed by the director of nursing and clinical governance and authored by academy manager. The first provision of the policy was approved on July 2007 and it was reviewed on September 2009, and October 2011. The policy group was responsible to consult and discuss the entire planning process to obtain appropriate data. The policy group consisted of: the trust risk manager, trust health

and safety manager, head of operations, head of workforce and HR, Yeovil academy senior team, facilities manager, occupational health lead, resuscitation officer, matrons, etc.

The policy had Equality Impact Assessment (Bambra et al., 2010) on 29<sup>th</sup> September 2009, followed by reviews on 03/10/11 and 05/06/2014 accordingly. Finally, the policy was audited on 5<sup>th</sup> June 2014 and was approved by the policy group to be implemented. According to Adult Social Care Outcomes Framework (2014), which shared complementary measures in the health and social care, the fowling factors have to be considered when auditing health policies: comparison of the outcomes, effectiveness of cooperation, intelligible and reflective, safety, cost effectiveness, and equalities. Yet, the effectiveness of these measures needs to be revealed on the next review, on June 2017. The policy had not provided clear information regarding proponents and opponents, as it was an internal policy, preceded by the policy group. Considering the literature statics (HSE, 2015/16; Dellve, Lagerstrom, and Hagberg, 2003), which revealed a high rate of work related injuries amongst NHS staff, an alternative would be a national manual handling policy that could be proposed and applied for all NHS hospitals rather than in Yeovil District Hospital.

The policy considered all measures sufficiently well to prove the feasibility of objectives. This is due to adequate approaches such as vigorous audit and reviews, whereby the appropriate amendments were proposed and applied. In addition, this policy was developed by considering 15 existing legislations and regulations including: Health and Safety at Work Act 1974, Management of Health and Safety at

Work Regulations 1999, Manual Handling Operations Regulations 2002, Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995, Human Rights Act 1998, Equality Act 2010, Safeguarding Vulnerable Groups Act 2006, etc.

Furthermore, the policy had vigorously specified the responsibility of all staff who were involved in the implementation process (Burton, 1997) including: Chief Executive, Chief Finance and Commercial Officer, Senior Managers, Line Managers and Professional Leads, Moving Handling and Ergonomics Advisor, Fire, Health & Safety Advisor, Specialist Handling Personnel and all Staff. This policy had formed a type pyramid system, a simple strategy of monitoring and conducting of tasks, to ensure the appropriate implementation process, as following.

The Chief Executive was the responsible officer for all aspects of health and safety within the Trust. The Chief Finance and Commercial Officer was the director who was responsible for Health and Safety, while ensuring that proper measures were succeeded across the Trust to protect staff and patients from injury. Senior managers, line managers and professional leads, were responsible to manage and co-ordinate all health and safety issues. In addition, they were accountable for making sure that manual handling risk management measures were implemented as specified in this policy. Line managers had an important role to play in the delivery of a safe work setting for staff and were accountable to ensure that their staff follow safe manual handling techniques and conduct safe practices. The Moving Handling and Ergonomics Advisor (MHA) were responsible to act as the Nominated Manual

Handling Competent Person (NMHCP) for the Trust and ensure that manual handling risks are successfully accomplished and monitored, with assistance from the Academy Manager. The Fire, Health and Safety Advisor (FHSA) were responsible to provide support and advice to managers, the MHA and local trainers on legal and technical compliance. This support included training and assessments to related staff groups as required assisting management in accomplishing the requirements of this policy. In addition, Specialist Personnel (e.g. physiotherapists, occupational therapists, and Critical Care staff) were required to be frequently updated in their specialist manual handling techniques as considered appropriate by their individual governing bodies to provide essential manual handling principles. Finally, all staff was responsible to comply with this policy in order to manage their own personal safety and the safety of patients. The policy has provided robust task specification and monitoring process of risk assessments (a method by which harmful hazards were identified and categorized to different risk levels, so that appropriate controls and actions could be taken to reduce the risks).

Buehler, W., (1998) indicated that In order to improve the health of the population, a policy has to identify a health problem with continuous and systematic processes of data collection, analysis, and interpretation of descriptive information by linking data from more than one system. Although, this policy had strong links with other previously implemented regulations and legislations, there is not sufficient data regarding its effectiveness and outcomes, as it is a relatively new policy. The next review (2017), will reveal sufficient data and will indicate if the objectives of the policy have been achieved and to what extent. The next review will also identify, if the

policy has benefited NHS employees and if it has been recognised as a success or failure by the staff.

Risk management strategy is one the most important tools for implementing an evidence based policy (Jacobs et al., 2012). This policy had developed a robust risk management strategy for several measures, that was based on a "minimal and safer lifting" policy that enabled the Trust to adopt an ergonomic approach and endeavour to work. This means that although manual lifting is part of everyday life and cannot always be totally eliminated or be made perfectly safe, yet unavoidable and hazardous manual handling had to be kept to an absolute minimum, while a sufficient risk assessment was carried out to avoid harms (Burton, 1997). In addition, safer handling methods, based on reliable evidence-based practices, had to be used, whenever possible. In the case of unpredicted imminent life threatening circumstances, a dynamic assessment approach had to be adopted to reduce the risk of harms.

To adhere to the pre-planned risk management strategy and aid safer clinical handling, moving and ergonomics, the Trust ensured that employees were avoiding any hazardous manual handling tasks whenever possible, assessing clinical and non-clinical manual handling tasks prior to moving, assessing the risk of prolonged working postures that were unavoidable and reducing the level of risk to minimum so far as is practicable. To achieve these goals the policy had clear strategy in respect of risk assessments (Orme et al., 2007). All of the risk assessments comprised action plans, which were to be implemented by the risk assessors. In addition, risk

assessments and implementation steps had to be documented and if actions could not be implemented, the line manager had to be informed and an incident report completed.

This policy had a strong reviewing strategy of tasks to reduce the risk of harms and avoid repeating incidents. Based on this review plans, any risk assessment should be carefully considered and reviewed within the appropriate time frame or at least annually, and all changes documented and implemented as required. Other review causes included: following an actual or near miss adverse incident that lead to substantial harm, changes in legislations, changes in employees, change of equipment, procedures/ processes and location. The review outcomes were clearly documented and actions were implemented accordingly.

The policy had set up clear manual handling and ergonomic risk assessment plans to identify any potential harmful (clinical and non-clinical) manual handling or working posture (Dellve, Lagerstrom and Hagberg, 2003). These manual handling and ergonomic risk assessments were conducted by managers and were available for staff to read and refer to them when needed. They had to be kept within the departments for compliance monitoring, reference and audit. To ensure that all assessments were suitable and sufficient, and to measure the risk of moving/handling tasks, the policy had set up the following two criteria and components: individual capability of staff undertaking the task and load (both for object and person), and environment and equipment.

As this is a relatively new policy (2014), and there is not enough data to evaluate the effectiveness or analyze the outcomes. Therefore, this policy will be evaluated based on its benefit and advantages for NHS staff and the prevention of manual handling injuries. Ariëns et al., (2001) indicates that the prevalence of work related injuries, linked to manual handling and ergonomics such as arms, neck, shoulders and back, are at a high level. The high rate of manual handling incidents has been confirmed by other evidence and statics including World Health Organization Statistical Information System (WHOSIS), HSE and NHS data. Therefore, this manual handling policy would certainly be a useful approach to reduce the workplace incidents and prevent many work related injuries, if implemented successfully (Kohatsu, Robinson and Torner, 2004).

Baggott R., (2011) indicated that there are many challenges to an evidence based policy including: a lack of communication between researchers and policy makers, policy makers are not informed about ongoing research, and researchers are not often aware of the policy questions in order to make their research more relevant (Bambra et al. 2010, Jansen et al. 2010). To ensure that this policy overcome these challenges and achieve its objectives, the Trust had four types of vigorous and foreseeable manual handling risk assessments including: equipment risk assessment, patient specific handling profile, general manual handling risk assessment and ergonomic job task analysis. These risk assessments were based upon ergonomic working principles, the execution of safe load management, safe positioning of patients, appropriate handling techniques with provision plan, maintenance and regular inspections of equipment.

The policy had planned some arrangements for ensuring that all actions are carried out appropriately. Therefore, all actions related to executing the risk assessment had to be documented in the risk assessment. In circumstances when actions could not be executed, the line manager had to be informed and an incident report prepared. The incident report had to identify why the risk assessment actions could not be completed and if this was related to the patient, a record had to be included in the patient's health record too. To ensure that these risk assessments and their outcomes were followed rigorously; the policy has provided a comprehensive safer load management and ergonomic working procedures for managers as attachment. In addition, staffs were required to conduct safer moving and handling principles, and they had to be educated through compulsory training in line with manufacturer's recommendations, in conjunction with risk assessments to decrease the risk of incidents. The Trust recognised that the emergency and imminently life threatening situations may not be foreseen and may occur at any time (The NICE Guidelines, 2013). Therefore, the Trust advocated that in these situations, safer handling techniques and equipment should be used to reduce the risk of harm.

Jacobs et al (2012) indicated that training and preparation is an essential role in achieving the objectives of a health policy. Therefore, the Trust had proper strategy to inform, instruct, train and supervise all staff in the observance of the requirements of this policy according to the Corporate and Local Induction for Permanent and Temporary Staff Policy (2007), and the Mandatory Training Policy set out the arrangements for training. In addition, manual-handling training was included in the Trust's Training Needs Analysis (TNA). All staff (substantive, bank/temporary, voluntary, clinical or non-clinical) including students, had to undertake the proper

manual handling training. To ensure that the training and monitoring have been undertaken accordingly, managers had to be informed on staff attendance at training.

Generally implementation of policies are complicated processes and hardly linear or analytical (Jacobs et al., 2012). Simply providing evidence to policy makers and assuming them to take action upon it is not realistic idea. (Jansen et al. 2010). There are several feedback loops concerning basic and applied research, public health activities, monitoring, surveillance, and public opinions in the media (Macintyre S., 2012). Researchers usually promote scientific (objective) evidence, which has been supported empirically and theoretically, even if it required a long period of time (Hunter D., 2003). Conversely, policy makers need evidence, which is colloquial, relevant to context, practical, and timely with clear messages (Baggott, 2011). For instance, in chaotic situations and accidents, policy makers certainly do not gather all the relevant evidence, do not often explore and identify problems and results vigorously. They usually choose the best available alternative, create the policy and implement it, while monitoring and evaluating (Bambra et al. 2010).

The MHA was responsible to monitor the use of agreed manual handling techniques including appropriate risk assessments, equipment, training provision and content by undertaking unexpected compliance spot checks of staff and by trends found in incident reports in all working areas. The Incident reporting system were reviewed by the Health and Safety Committee with data presented by the Health and Safety Manager to review incidents raised as a result of failed actions based on risk

assessment. In addition, all risk assessments were supervised through the Trust risk register and local ad hoc compliance checks made by the MHA. Finally, any decision necessary following these checks were sent to the line manager for further action and the Health and Safety Committee were responsible to overview this monitoring actions.

This policy had given clear statement regarding applicability strategy (Buse, Mays and Walt, 2012), which stated, "this applies to all staff both clinical and non-clinical, including substantive and bank/temporary posts, volunteers and students working within Yeovil District Hospital NHS Foundation Trust. Failure to follow this policy may result in disciplinary procedures being taken against individuals who do not follow safe handling practices. The policy had confirmed that it has been assessed and implemented in line with the policy on procedural documents and an equality impact assessment has been carried out to ensure the policy is fair and does not discriminate any staff groups (White Paper, equity and excellence, 2010).

This policy has two attachments (Annex A and B), with a full description of manual handling guidance for managers (A), and equality impact assessment tools (B). ANNEX (A), provided responsibilities of managers in every level, and described details of all task and risk assessments including: safer load management and ergonomic working procedure, patient handling techniques, and equipment provision/ maintenance and inspection procedure. ANNEX B, provided a predesigned tool to assess the equality impact of this policy by evaluating different variable such as ethnic origins, nationality, gender, sexual orientation, age, disability,

discrimination, exceptions, legality, justifiably etc. which needs to be completed and forwarded to the relevant committee for consideration and approval with any procedural document.

According to NHS statics (2014), the lack of knowledge and misunderstanding in correct moving and handling is costing the Trust millions every year. In addition, musculoskeletal conditions link to manual handling have been shown to cause a reduction in overall productivity and absenteeism from work (Ariëns et al., 2001). Therefore, both employee and employer need to work together to help implementing this type of health policy to reduce work related injuries.

A range of policy initiatives has supported the government's responsibility in relation to public health since 1997 (Baggott, R., 2004). The concerns in public health are not linked to the lack of comprehensive policies (Brownson, Chriqui and Stamatakis, 2009), but it is associated with the planning process and implementation, where progress has been less inspiring (Crinson I., 2008). Improving public health problems have to be a consistent tendency in all health care systems and all the effort has to be focused on appropriate implementation processes (Lee, Buse and Fustukian, 2001). However, this depends largely on the government strategy on health inequalities, funding and how prioritises the heath care alternatives (Bambra et al. 2010).

In addition, WHO (2010) statics indicate that governments lack systematic measures, concerning which research institutions to turn to, and when and how to create contact with academic researches. Consequently, governments are regularly not informed about current research. Literature indicate that there are several factors and unanswered questions (Brownson, Chriqui and Stamatakis, 2009) that affect the outcomes of policy including: policy-oriented research, policy makers pursuit mainly for evidence that supports their position (Palfrey C., 2000), researchers or research institutions have their own plan (e.g. restriction to particular research subjects), limiting related research projects by focusing on trade and growth (Lee, Buse and Fustukian, 2001), political economy considerations, non-existent or inaccessible data, and researchers supply information that policy-makers demand (Jacobs et al., 2012).

Considering public health as a complex adaptive system (Ham C., 2009), an effective health policy would require a new government approach, which facilitates new management systems and skills for the public health staff (Brownson, Chriqui and Stamatakis, 2009). Nonetheless it is not just a case of promoting a set of skills devoid of context (Abel-Smith et al., 1995). Since, context is an important factor, particularly in a subject like public health inequalities (Bambra et al., 2010), which transcends so many groups and professionals, yet there is a long way from achieving such results, unless the capacity for public health practice is enhanced, otherwise the policy in this topic may remain symbolic forever (Baggott R., 2007).

For more than a century and a half, researchers, reformers and politicians have criticised that social and public health policies are not evidence based (Walt G., 1994; Ham C., 2009). Recently, such remarks have co-existed with different reports from politicians in the UK and other developed countries (Crinson I., 2008), highlighting the significance of an evidence-based policy. Hence, considering the criteria and importance of a policy being evidence based, (Macintyre S., 2012), there are obvious indications that planning process of this policy, involved extensive literature research. In addition, the policy has vigorously considered other aspects of Evidence Base Public Health (EBPH) concepts, such as: protecting staff against environmental hazards (Brownson, Chriqui and Stamatakis, 2009), preventing injuries, promoting and encouraging healthy behaviors, aassuring the quality and access to services as specified by Kohatsu, Robinson and Torner (2004). EBPH involve assisting individuals to stay healthy and protecting them from threats to their health (Jacobs et al. 2010), helping people in situations that have an impact on the health of many people (Yeovil District Hospital NHS Trust staff in this policy) and reduces the causes of ill-health (Jansen et al., 2010) such as preventing an incident of manual handling in this policy.

This policy had developed a specific strategy for risk assessments and entire implementation processes, which are crucial steps to gaining policy objectives as defined by Baggott R. (2011). Originally, the policy making process, has been influenced by the government (Brownson, Chriqui and Stamatakis, 2009), since this is an internal policy, there is no evidence of it being dictated by any government departments. All the information is indicating that this has been an initiative by Yeovil

District Hospital NHS Foundation Trust; therefore there are no signs of bias

favouring government departments.

It is not clear that in what extent this policy is associated with other regulation and

legislation and if the success or failure of this policy depends on the effective

implementation and outcomes of those regulations (Maglin, Wilmot and Manthorpe,

2002). Even, this policy did not provide sufficient information regarding developing

the initial statement, gathering and quantifying data process, yet considering the

above factors and all aspects of this policy, it can be concluded that this policy meets

most of the criteria to be evidence-based and meet the equality criteria as required

by White Paper Equity and excellence, Liberating the NHS (2010). Therefore, it will

most probably achieve its objectives if the implementation process succeeds. Finally,

approving and implementing such robust manual handling and ergonomic policies in

a national level, would be recommended to policy makers as an alternative to

managing manual handling incidents for the entire NHS staff.

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# References

### Journal paper

Abel-Smith B., Figueras J., Holland W., McKee M. and Mossialos E., (1995) Choices in Health Policy, An agenda for the European Union. *Aldershot:* Dartmouth.

Ariëns, G., van Mechelen, W., Bongers, P. M., Bouter, L. M. and van Der, W., (2001) 'Physical risk factors for neck pain', *Scand J Work Environ Health*, 26:7-19.

Brownson C. R., Chriqui, J. F., and Stamatakis A. K., (2009) Understanding Evidence-Based Public Health Policy. *American Journal of Public Health*: Vol. 99, No. 9, pp. 1576-1583. doi: 10.2105/AJPH.2008.156224.

Burton A. K., Symonds T. L., Zinzen E., Tillotson K. M., Caboor D., Van Royf P. and Clarys J. P., (1997) Is ergonomic intervention alone sufficient to limit musculoskeletal problems in nurses? Vrije Universiteit Brussel, Laarbeeklaan Brussels, Belgium *Occup. Mod.* Vol. 47, No. 1, pp. 25-32,199.

Chaffin, D. B. and Andersson, G. B. (2006) Occupational Biomechanics, fourth ed, *Wiley*, New York.

Dellve, L., Lagerstrom, M. and Hagberg, M. (2003) 'Work-system risk factors for permanent work disability among home-care workers: A case-control study', *International Archives of Occupational and Environmental Health, 76*(3): 216-224. Hignett S., (2003) Intervention strategies to reduce musculoskeletal injuries associated with handling patients: a systematic review *Occup Environ Med* 60: e6 doi: 10.1136/oem.60.9.e6.

Huang, G. D., Feuerstein, M. and Sauter, L. (2002) 'Occupational stress and work-related upper extremity disorders: concepts and models', *Am J Ind Med*; 41:298–314.

Jacobs J. A., Jones E., Gabella B., Spring B., Brownson R., (2012) Tools for Implementing an Evidence-Based Approach in Public Health Practice, *Preventing Chronic Disease*, 9:110324. DOI: 10.5888/pcd9.

Jansen M. W., van Oers H. M., Kok G., de Vries N. K., (2010) Public health: disconnections between policy, practice and research, Health, Research Policy and Systems, *BioMed Central Ltd*, DOI: 10.1186/1478-4505-8-37.

Kohatsu N. D., Robinson J. G., Torner J. C., (2004) Evidence-based public health: An evolving concept, *Am J Prev Med.* 27(5): 417-21.

Bambra C., Smith K. E., Garthwaite K., Joyce K. E., Hunter J. D., (2010) A labour of Sisyphus? Public policy and health inequalities research from the Black and Acheson Reports to the Marmot Review, *BMJ publishing group Ltd*.

Smedley J., Egger P., Cooper C., Coggon D., (1997) Prospective cohort study of predictors of incident low back pain in nurses, University of Southampton, Southampton General Hospital, *BMJ*; 314:1225–8.

## **Bibliography**

Baggott R., (2007) Understanding Health Policy, *Bristol: Policy Press*.

Baggott, R. (2011) Public health: policy and politics 2nd ed, *Basingstoke*, *Palgrave Macmillan*.

Buehler J. W., (1998) Surveillance. In: Rothman K. J., Greenland S., Modern epidemiology, 3rd ed., 435-57, *Philadelphia, PA: Lippencott-Raven*.

Buse, K., Mays, N., Walt, G., (2012) Making Health Policy Maidenhead, *Open University*.

Crinson, I. (2008) Health Policy, A Critical Perspective, London: Sage Publications.

Ham, C. (2009) Health Policy in Britain, Public Policy and Politics, *Basingstoke: Palgrave Macmillan.* 

Hunter j. David (2003) Public health policy, policy for 21st century public health, First Edition 2003, *University of Durham*, ISBN: 9780745626475.

Lee K., Buse K. and Fustukian S., (2001) Health Policy in a Globalising World Cambridge: *Cambridge University Press*.

Macintyre S., (2012) The Royal Society for Public Health. Published by Elsevier Ltd, public health 126, 217 e219 Plenary Evidence in the development of health policy MRC/CSO Social and Public Health Sciences *Lilybank Gardens*, Glasgow.

Maglin N., Wilmot S. and Manthorpe, J. (2002) Key Debates in Health and Social Policy Buckingham: *Open University Press*.

Orme, J., Powell, J., Taylor, P. and Grey, M. (2007) Public Health for the 21st Century: New Perspectives on Policy, Participation and Practice, Maidenhead: *Open University Press*.

Palfrey C., (2000) Key Concepts in Health Care Policy and Planning London: *Macmillan*.

Walt G., (1994) Health Policy, An Introduction to Process and Power London: *Zed Books*.

#### Website sources

Adult Social Care Outcomes Framework, (2014), available at: www.nationalarchives.gov.uk/doc/open-government-licence/, accessed on April 2017.

Demographic and health surveys, available at: http://www.measuredhs.com/, accessed on April 2017.

Guidelines Working Group (2001) Updated guidelines for evaluating public health surveillance systems. MMWR 50(RR13): 1-35. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5013a1.htm, accessed on February 2017.

Layne J., An artful approach to program evaluation, *Optimum, The Journal of Public Sector Management* • Vol. 29, Nos. 2/3 (1-9), available at: http://www.optimumonline.ca/pdf/29-2/program\_evaluation.pdf, accessed on December 2016.

Manual handling, (2014) NHS Employers/POSHH, available at: http://www.nhsemployers.org/~/media/Employers/Publications/Manual%20handling.p df, accessed on April 2017.

Prevention and management of in-patient falls policy (2014) Yeovil District Hospital NHS Foundation Trust, available at: http://www.yeovilhospital.co.uk/ In-Patient-Falls-Policy\_March-2014.pdf, accessed on January 2017.

The Corporate and Local Induction for Permanent and Temporary Staff Policy (2007), Yeovil District Hospital available at: http://www.yeovilhospital.co.uk/, accessed on January 2017.

The Health and Safety Executive (HSE), (2014) handling injuries in Great Britain, available at: www.hse.gov.uk/statistics/, accessed on April 2017.

The National Patient Safety Agency (NPSA), (2012) Slips, trips and falls in hospital policy (2007) National Patient Safety Agency, www.npsa.nhs.uk, accessed on January 2017.

The NICE Guidelines on Falls Management (2013), available at: https://www.nice.org.uk/Guidance/CG161, accessed on January 2017.

The preconditions for successful evaluation: Is there an ideal paradigm? Policy Sciences (1983), Volume 16, Number 1, Pages 67-7, available at: http://www.springerlink.com/content/p572006513527558/, accessed on April 2017.

The World Health Report 2008 - primary Health Care (Now More Than Ever), available at: http://www.who.int/whr/2008/en/index.html,accessed on January 2017.

Tools for Implementing an Evidence-Based Approach in Public Health Practice: available on http://www.official-documents.gov.uk/ ISBN: 9780101798525, accessed on February 2017.

White Paper; Equity and excellence (2010): Liberating the NHS, available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\_117353, accessed on January 2017.

World Health Organization (1999) Health-21: The Health for All policy frameworks for the WHO European Region. Copenhagen: World Health Organization.

World Health Organization (2010) The World Health Report 2000, Health systems: improving performance. Geneva: WHO.