Client based care case study: elderly with diabetes



Client Based Care Study

Introduction

In this essay, the author will explore the care of a single patient, encountered in clinical practice, examining the impact on quality of care, and on the health and wellbeing of the individual, of key aspects of care. Case studies allow nurses to reflect on practice, examine critical elements of case and of clinical decisions made and actions taken, and to examine areas of care in more detail. This essay will explore the care of one patient, who shall be called Molly, an older, community dwelling adult with Type 2 diabetes, who was admitted to a medical admissions ward having been found unconscious at her home by neighbours.

The essay will examine the aspects of her care that relate to the management of her condition, the assessment and management of her social, care and personal needs, and the planning of her future care and support needs. Reference will be made to governmental guidelines and policies, and to interprofessional working as a fundamental component of meeting patient needs in this case.

Discussion

Diabetes is a chronic disease which is known to impact significantly on the health, wellbeing and prosperity of individuals, of families, and of society as a whole ^[1]. More than 1. 4 million in the UK are affected by diabetes ^[2]. Because of the great impact that this disease has on public health and on https://assignbuster.com/client-based-care-case-study-elderly-with-diabetes/

the use of NHS and social care resources and services, the Department of Health has published a National Service Framework for diabetes, which not only sets standards for management and diagnosis of the disease, but outlines best practice in the light of the latest available evidence on the condition [3].

There are two types of diabetes, Type 1 and Type 2, both of which are signified by a persistent high level of circulating blood glucose, due to a lack of insulin or a significantly impaired response to insulin, or to a combination of both factors ^[4]. Type 1 diabetes is due to the insulin-producing cells in the pancreas, called the Beta Cells, located in the Islets of Langerhans, failing to produce insulin, because the body's own immune system has destroyed them ^[5]. Type 2 diabetes is usually caused by a reduced amount of insulin production by these cells, and by a degree of insulin resistance within the body, wherein the body's metabolic responses to insulin are not as sensitive ^[6]. Type 2 Diabetes is the condition which Molly, the patient in this case study, has been affected by.

Molly is a 66 year old woman who has had Type 2 diabetes for 17 years. She is treated by twice daily insulin, and, living independently still in her own home, she is visited once weekly by a district nurse to monitor her glycaemic control and check her insulin stocks and her general wellbeing. Molly has a BMI of 35, and also has a history of hypertension which is controlled by medication. She has her blood pressure checked weekly as well. Molly lives alone, never having married, and has no children. She has an active social life, attending a local book group, taking part in a local history and re-

enactment society, and volunteering at a community library. She is known by the district nurses to be competent in administering her own insulin and measuring her own blood sugar, but she does not always adhere to her regimen and her recommended diet, because it can interfere with her social life.

Molly was found unconscious by one of her neighbours at 9 pm, and the ambulance was called. Paramedics attending were told of her history by her neighbour, who waited with her, and suspected either Diabetic Ketoacidosis or hypoglycaemia. Diabetic ketoacidosis is a condition which can be lifethreatening, and is usually due to a lack of insulin, which means that the cells of the body are unable to use glucose for energy, and so instead convert fat reserves to energy, which can produce ketone bodies which can adversely affect brain function ^[7], ^[8]. Hypoglycaemia can be caused by an overdose of insulin, or inadequate carbohydrate intake in a person who is taking insulin, or by the patient taking too much exercise, thus using up glucose, or by a combination of these

Paramedics found her blood sugar to be 1. 1 mmols, and administered glucagon to reverse the hypoglycaemia. She recovered consciousness quickly once her blood sugar improved, but was also given facial oxygen, and had full observations taken. Molly remained confused after insulin administration. She was taken to the medical admissions unit for a full assessment and, if necessary, in-patient admission and review of her diabetes. According to emergency care principles for the diabetic patient, the priorities are to save the patient's life, alleviate their symptoms, prevent long-term complications of the disease and their current risk factors, and https://assignbuster.com/client-based-care-case-study-elderly-with-diabetes/

then to implement care that will help to reduce risk factors for their health, such as hypertension obesity, smoking, and hyperlipidemia, along with providing ongoing education and support for self-management of their condition ^[9].

In Molly's case, the team evaluated her condition, because although the initial diagnosis was hypoglycaemia, suggested by her self-reported history of missing meals that day and being very busy, the differential diagnosis was diabetic ketoacidosis, which can be precipitated by physical or biological stress, including changes in endocrine function or other diseases, such as myocardial infarction [10]. Molly is pale as well, a finding suggestive of hypoglycaemia, along with her elevated blood pressure and dilated pupils [11]. As Molly was conscious, her Glasgow Coma Score was 13, and she had responded well to glucagon, according to established diabetic protocols, she needed to be stabilised and undergo a range of investigations to determine any other disease or factors precipitating her condition [12].

Blood pressure, temperature, pulse and respiration rate were monitored recorded via continuous telemetry, and an ECG was carried out, which ruled out myocardial infarction. Molly had blood sent for Full Blood Count, Liver Function Tests, Urea and Electrolytes and Glucose, as well as insulin levels, prothrombin time, clotting factors [13]. Prothrombin Time and Clotting Factors may also be tested, due to the risk of disseminated intravascular coagulation. Bloods were also sent to test HbA1c; Fructosamine; Urinary albumin excretion; Creatinine / urea; Proteinurea; and Plasma lipid profile [14]

. Urine was dipped with reagent strips to test for glucose, protein (suggestive of kidney problems) and ketones.

Because of her presentation, Molly was put on a continuous IV infusion of insulin, titrated hourly using a syringe driver against blood glucose, with an infusion of 5% glucose running in a different IV port. IV fluid therapy, and fluid balance, were also monitored closely $^{[15]}$. Diabetes can cause kidney damage and impaired urinary function, so monitoring kidney function was an important part of care $^{[16]}$.

Once Molly was stabilised, ongoing care related to supporting her health and wellbeing, and minimising complications of her diabetes, became an important part of care. Diabetes is a significant public health issue, because it is not only associated with the 'social' disease of obesity, but also because as a disorder it is associated with a number of serious health implications [17] . These complications include macrovascular complications, including atherosclerosis and cardiovascular disease [18], [19], [20]; diabetic retinopathy and sight loss due to vascular damage which weakens the walls of the blood vessels in the eyes, causing microaneurysms and leakage of protein into the retina, vascular damage and scar tissue [21], peripheral neuropathy, peripheral vascular disease and gastrointestinal dysfunction, gomerular damage, and kidney failure [22]. The impact of this disease on public health relates to the fact that many people of working age are diabetic, and because the condition is chronic as well as serious, with acute exacerbations and so many complications, it presents a serious drain on health and social care resources. Therefore, it is imperative that individuals https://assignbuster.com/client-based-care-case-study-elderly-with-diabetes/

with diabetes are identified as early as possible, and are educated and supported in good self-management, and provided with ongoing care to maintain good glycaemic control ^[23].

Molly's status as an older adult is also a public health issue, because older adults constitute the largest patient group in the UK, and the ones which consume the biggest proportion of healthcare services [24]. However, it was also important to avoid stereotyping Molly as an older person, and making assumptions about her needs and her health. Although she was obese and hypertensive, and had Type 2 diabetes, she was very active and had a very important social life, and was usually independent and self-caring. It was important to consider the social support that she had, and to ensure that she was aware of any services or support she might be able to access if she felt it necessary. However, some members of the multidisciplinary team, in particular, some of the medical staff, did appear to act in a way that suggested they were stereotyping Molly based on these factors (age, weight, health) and were discussing her case without really making clear reference to her as a whole person. This leads on to the need to evaluate the multidisciplinary input in Molly's case, and the quality of the interprofessional working that took place, which is discussed below.

As can be seen from the list above, diabetes can affect the individual and the body in complex ways, and so requires an holistic approach to care ^[25]. Care should also be based on evidence based, collaboratively agreed care pathways ^[26], as suggested by the NSF for diabetes ^[27]. Molly may need a comprehensive review of her management and her lifestyle, the patterns of

care and the ongoing monitoring of her condition ^[28]. The National Institute for Clinical Excellence recommends a patient-centred approach to ongoing patient education and management, and also suggests a number of options for patients who might require different forms of insulin administration, such as continuous sub-cutaneous insulin ^[29], ^[30]. This, however, was not suitable for Molly, because it is usually for people with Type 1 diabetes.

Health promotion and education is an important part of Molly's care at this point, which is related to the fact that her current hospital admission is due to mismanagement of her condition herself. It was important to determine what factors about her lifestyle and behaviours had led to the lapse and the serious hypoglycaemia. Ongoing care, health promotion and education involved multi-professional collaboration and integration of care into a complex, detailed care plan. The aim was to provide Molly with the information, support and guidance that would allow her to view her diabetes management as a means of achieving a better quality of life, rather than viewing her diabetes as something which interfered with her quality of life. It was also important to view Molly in terms of supporting her to continue with her normal social activities. Research shows that making changes in lifestyle, and providing good, effective health education, helps to contribute to reducing rates of diabetic complications [31].

However, the kind of health education and support used is important, because different approaches have different levels of effectiveness. Some research examines the differences between health education that tries to persuade patients to be compliant with regimes and activities designed by

health professionals, approaches which are usually generic, and health education that is client-centred [32]. Client centred approaches are usually more effective, as they are individualised. Research shows very clearly that patients with diabetes need to understand their disease fully, and be supported and empowered to make the lifestyle and behavioural changes that will enhance their wellbeing whilst enabling them to control their condition [33]. In this case, a diabetic nurse specialist was involved with Molly's case, and a plan for health education and support drawn up, with clear guidelines and a tailored plan for managing her social life around her diabetes. Diabetes UK recommends a structured, tailored education programme for people with the condition [34].

Interprofessional and multidisciplinary working is a fundamental component of care for a patient with diabetes like Molly ^[35]. This means that diabetic patients should experience seamless care, addressing all needs, with access to all the professionals necessary to support her care ^[36]. Specialist involvement, including diabetic nurse specialists, was a feature of this care, and helped with a client centred focus ^[37]. The literature suggests that it is important for a lead professional to take charge ^[38], but in Molly's case, her lead nurse was not present for the majority of her inpatient stay, and there was a lack of effective coordination of the complex number of professionals involved.

In relation to multidisciplinary, interprofessional working Molly was referred to ophthalmic services for a check-up, to ensure that there was no diabetic retinopathy or glaucoma. She was referred to a dietician to support her in https://assignbuster.com/client-based-care-case-study-elderly-with-diabetes/

managing her dietary intake. She was also referred to a social worker. Diabetic specialist doctors were involved, and a report was sent to the diabetic nurse at her local surgery, as well as to her GP. Molly ended up staying in hospital, however, on a medical ward, for two weeks, even though her condition was stabilised rapidly, and she experienced no further complications. In this case, interprofessional working was not effective, because although the said referrals were made, or were recorded to have been made, Molly was not seen by the dietician or a social worker for over a week, and only when she began to threaten to take a discharge against medical advice did the dietician and social worker arrive and get involved. The doctors in charge of Molly's case however appeared to make judgements about plans for discharge and ongoing care without involving the nursing team and without considering some aspects of her social situation and Molly's own preferences and wishes.

It is apparent, from this case, that while Molly's immediate medical needs were met, the interprofessional working element of her ongoing care failed in some way. There are a complex range of professionals and support workers who provide healthcare [39]. Because of this complexity, interprofessional education has become part of healthcare education programmes [40]. Interprofessional working is supposed to help with the provision of true patient-centred care, and the highest quality of care [41]. However, experience in this case, and some of the literature, cites ongoing problems with interprofessional working in a number of contexts. Some of this is to do with the professional boundaries and hegemonies which persist in healthcare professions, which continue to be defended rigorously by each profession [42] https://assignbuster.com/client-based-care-case-study-elderly-with-diabetes/

- . Some literature shows that elitism, professional isolationism and professional defensiveness can have negative effects on health professionals themselves as well as on the quality of care delivery ^[43]. Yet there is ample government guidance, particularly from the Department of Health, which aims to improve service provision, and the NSF for Older People ^[44], identifies the most important elements of care and service provision which must be improved upon. Standard 2 of the NSF, ' Person-Centred Care', requires that health and care services are designed around the needs of the older patient (and their carers) ^[45]. However, this kind of needs-based care then demands
- . " an integrated approach to service provision... regardless of professional or organisational boundaries, [which is] delivered by clinical governance, underpinned by professional self regulation and lifelong learning" ." [46]

In Molly's case, the fundamental role of the nurse in providing leadership and coordination for her care was not acknowledged or supported. Some researchers suggest that this can be due to medical hegemony [47]. Current approaches to offsetting such ingrained hierarchical thinking are very much focused on initial education of healthcare professionals, overcoming historical professional boundaries [48], [49], [50]. The research shows that there is a difference between multiprofessional working, which does not transcend the traditional hierarchies and boundaries, and inter-professional working, which is built on the desire to share care, support each other, and value each others' expertise [51]. Government drivers continue to underpin strategies for better, ' joined up working.' [52], [53].

The failures which occurred in Molly's care were clearly linked to poor communication between the healthcare professionals, a lack of joined up working, and a lack of recognition, perhaps, of the importance of the social aspects of Molly's case, and the health-education aspects, based on her individual needs. On reflection, the author believes that had there been better, collaborative working, then none of these needs would have been overlooked and they would have been dealt with more speedily. But another aspect of her care that could be improved upon was related to her own involvement in her case. Molly was not fully involved in her case discussions and in the medical decisions made about her care. While this can be a product of the medical hegemony mentioned before [54], it constitutes a serious oversight and is not in line with governmental guidance [55]. Research shows that the patient voice is the most important one in terms of collaborative care planning and management [56].

Conclusion

This case study has identified the case of Molly (a pseudonym), an older patient with Type 2 diabetes who received good quality clinical care in meeting her acute care needs and managing her medical condition and its potential consequences, but for whom interprofessional working failed in relation to ongoing care and multi-discinplinary involvement. Diabetes is a significant public health issue, and a range of governmental guidance and research evidence informs care for patients with the condition. The public health issues surround the serious morbidity and mortality associated with diabetes, and the fact that good management and glycaemic control can

minimise these complications. In this case, the patient's needs were prioritised medically, but interprofessional communication broke down. While the appropriate referrals were made, proper joined up working did not take place. Similarly, Molly was not fully involved in her case, and should have been.

Diabetes is a serious, chronic condition, and one which requires patientcentred assessment, identification of needs, and management. All those involved should adhere to the available guidelines and commit to effective interprofessional working.

References

Allen, D., Lyne, P. & Griffiths, L. (2002) Studying complex caring interfaces: key issues arising from a study of multi-agency rehabilitative care for people who have suffered a stroke. *Journal of Clinical Nursing* 11 297-305.

Anthony, S., Odgers, T. & Kelly, W. (2004) Health promotion and health education about diabetes mellitus. *Journal of the Royal Society for the*Promotion *of* Health . 124 (2) 70-3

Banks, s. & Janke, K. (1998) Developing and implementing interprofessional learning in a faculty of health professions. *Journal of Allied Health* . 27 (3) 132-136.

Billingsley, R. & Lang, L. (2002) The case for interprofessional learning in health and social care. *MCC Building Knowledge for integrated care* 10 (4) 31-34.

Bloomgarden, Z. T. (2006) Cardiovascular Disease *Diabetes Care* 20 (5) 1160-1166.

Collis, S. (2005) Diabetes care by non-specialists must take a holistic approach. *Nursing Standard* 19 (31) 28.

Colyer, H. M. (2004) The construction and development of health professions: where will it end? *Journal of Advanced Nursing* 48 (4) 406-412.

Coombs, M. & Ersser, S. J. (2004) Medical hegemony in decision-making – a barrier to interdisciplinary working in intensive care? *Journal of Advanced Nursing* 46 (3) 245-252.

Department of Health, (2001) National Service Framework for Older People. Available fromwww. dh. gov. uk/publicationsaccessed 5-1-09.

Department of Health (2002) *National Service Framework for Diabetes*Available fromwww. doh. gov. ukAccessed 5-1-09.

Department of Health, (2006) A New Ambition for Old Age: next steps in implementing the national service framework for older people. Available fromwww. dh. gov. uk/publicationsaccessed 5-1-09..

Department of Health, (2007) Creating an Interprofessional Workforce: An Education and Training Framework for Health and Social Care. Available fromwww. CIPW. org. ukaccessed 5-1-09..

Diabetes UK (2006) POSITION STATEMENT – Structured Education for people with diabeteswww. diabetes. org.

uk/good_practice/education/recommendaccessed 6-1-09...

Edge, J. A., Swift, P. G. F., Anderson, W. & Turner, B. (2005) Diabetes services in the UK: fourth national survey: are we meeting NSF standards and NICE guidelines? *Archives of Disease in Childhood* 90 1005-1009.

Funnell, M. M. (2004) Patient Empowerment *Critical Care Nursing Quarterly* 27 (2) 201-204.

Gordon, F. & Ward, K. (2005) Making it real: interprofessional teaching strategies in practice. *Journal of Integrated Care* 13 (5) 42-47.

Greenwood, R., Shaw, K. & Winocour, P. (2005) Diabetes and the Quality and Outcomes Framework *British Medical Journal* 331 1340.

Guthrie, R. A. & Guthrie, D. W. (2004) Pathophysiology of Diabetes Mellitus. *Critical Care Nursing Quarterly* 27 (2) 113-125.

Hankin, L. (2005) Diabetic Emergencies Nursing Standard 19 (52) 67.

Hartley, H. (2002) The system of alignments challenging physician professional dominance: an elaborated theory of countervailing powers. *Sociology of Health and Illness* 24 (2) 178-207.

Hilton, L. & Digner, M. (2006) Developing a pathway of preoperative assessment and care planning for people with diabetes. *Journal of Diabetes Nursing*. 10(3) 89-94.

Howe, A. (2006) Can the patient be on our team? An operational approach to patient involvement in interprofessional approaches to safe care. *Journal of Interprofessional care* 20 (5) 527-534.

Keene, J., Swift, L., Bailey, S. & Janacek, G. (2001) Shared patients: multiple health and social care contact. *Health and Social Care in the Community* 9 (4) 205-214.

Keen, H. (2005) Diabetes and the quality and outcomes framework. *British Medical Journal* 331 1339

Kenny, G. (2002) Interprofessional working: opportunities and challenges.

Nursing Standard 17 (6) 33-35.

Kesby, S. G. (2002) Nursing care and collaborative practice *Journal of Clinical Nursing* 11 357-366.

Krentz, A. (Ed). (2004) *Emergencies in Diabetes : Diagnosis, Management and Prevention.* USA: John Wiley & Sons.

Masterson, A. (2002) Cross-boundary working: a macro-political analysis of the impact on professional roles. *Journal of Clinical Nursing* 11 331-339.

NICE (2003) *Guidance on the use of patient-education models for diabetes* www. nice. org. ukaccessed 6-1-09.

O'Brien, S. V. & Hardy, K. J. (2003) Developing and implementing diabetes care pathways. *Journal of Diabetes Nursing* . 7 (2) 53-6

O'Brien, S., Michaels, S., Marsh, J. & Hardy, K.(2004) The impact of an inpatient diabetes care pathway. *Journal of Diabetes Nursing* . 8(7) 253-6.

O'Neill, A. E. & Miranda, D. (2006) The right tools can help critical care nurses save more lives. *Critical Care Nursing Quarterly* 29 (4) 275-281.

Pollard, K. C., Miers, M. E. & Gilchrist, M. (2004) Collaborative learning for collaborative working? Initial findings from a longitudinal study of health and social care students. *Health and Social Care in the Community* 12 (4) 346-358.

Pollom, R. K. & Pollom, R. D. (2004) Utilization of a multidisciplinary team for inpatient diabetes care. *Critical Care Nursing Quarterly* 27 (2) 185-188.

Price, B. (2006) Exploring person-centred care. *Nursing Standard* 20 (50) 49-56.

Reinauer, H. (2002) *Laboratory Diagnosis and Monitoring of Diabetes Mellitus.*

Geneva: World Health Organization.

Robinson, F. (2006) Community programmes promote healthier living. *Practice Nurse* . 10 32 (8) 11, 13.

Scott, A (2006) Leadership in diabetes nursing: Where is it? *Journal of Diabetes Nursing* 10(9) 324

Skinner, T. C., Cradocl, S., Arundel, F. & Graham, W. (2003) Four theories and a philosophy: self-management education for individuals newly diagnosed with Type 2 diabetes. *Diabetes Spectrum* 16 (2) 75-80.

Snow, T. (2006) A breath of fresh care in diabetes *Nursing Standard* 20 (37) 14-15.

Soedmah-Muthu, S. S., Fuller, J. H., Mulner, H. E. et al (2006) High risk of cardiovascular disease in patients with type 1 Diabetes in the UK. *Diabetes*

Stanley, D., Reed, J. & Brown, S. (1999) Older people, care management and interprofessional practice. *Journal of Interprofessional Care* 13 (3) 229-237.

Suman, S. & Lockington, T. (2003) Generic care pathways for acute geriatric care and rehabilitation as a tool for care management, discharge planning and continuous clinical audit. *Journal of Integrated Care Pathways* 7 (2) 75-79.

Turina, M., Christ-Crain, M. & Polk, H. C. (2006) Diabetes and Hyperglycaemia: strict glycaemic control. *Critical Care Medicine* 34 (9) 291-300.

Watkins, P. J. (2003) *ABC of Diabetes (Fifth edition).* London: BMJ Publishing Group.

1

Footnotes

- [1] Department of Health (2002)
- ^[2] Hilton, L. & Digner, M. (2006) p 89.
- [3] Department of Health (2002).
- [4] Department of Health (2002).

- ^[5] Watkins, P. J. (2003).
- [6] Watkins (ibid)
- ^[7] DoH (ibid)
- ^[8] Hankin, L.(2005) p 67.
- [9] Watkins (ibid).
- [10] Turina, M., Christ-Crain, M. & Polk, H. C. (2006) p 291.
- ^[11] Guthrie, R. A. & Guthrie, D. W. (2004) p 113.
- ^[12] Edge, J. A., Swift, P. G. F., Anderson, W. & Turner, B. (2005) p 10005.
- [13] Hankin (ibid)
- ^[14] Reinauer, H. (2002)
- [15] Guthrie (ibid)
- [16] Guthrie (ibid)
- ^[17] DoH (2002); Department of Health, (2001).
- [18] Guthrie (ibid)
- [19] Bloomgarden, Z. T. (2006)
- [20] Soedmah-Muthu, S. S., Fuller, J. H., Mulner, H. E. et al (2006)

```
[21] Guthrie (ibid)
```

^[22] DoH (2002).

[23] DoH (2002)

[24] Department of Health, (2001)

^[25] Collis, S. (2005)

[26] Pollom, R. K. & Pollom, R. D. (2004)

^[27] O'Brien, S. V. & Hardy, K. J. (2003)

^[28] Snow, T. (2006)

^[29] NICE (2003)

[30] Diabetes UK (2006)

[31] Anthony, S., Odgers, T. & Kelly, W. (2004)

[32] Skinner, T. C., Cradocl, S., Arundel, F. & Graham, W. (2003)

[33] Antony (ibid)

[34] Diabetes UK (2006)

^[35] DoH (2002)

[36] Keene, J., Swift, L., Bailey, S. & Janacek, G. (2001)

^[37] Keen, H. (2005)

[38] Scott, A (2006)

^[39] Masterson, A. (2002)

[40] Pollard, K. C., Miers, M. E. & Gilchrist, M. (2004)

^[41] Kenny, G. (2002)

^[42] Colyer, H. M. (2004)

[43] Price (ibid)