Are we meeting oral health needs of care home populations?

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ABSTRACT

Aim: To evaluate care home (N) staff knowledge of oral care in comparison to NHS Quality Improvement Scotland (NHS QIS) guidelines. To identify barriers to delivering oral care and determine if Oral Health Educator (OHE) training had an effect upon staff knowledge of oral care delivery.

Setting: The study was undertaken within Greater Glasgow, 2005 to 2007.

Subjects and Methods: From 33 care homes (N), 28 participated in data gathering comprising 109 staff. A 'knowledge check-list' based upon daily oral care protocol from NHS QIS Best Practice Statement (BPS) served as template for knowledge assessment. An OHE undertook small group discussions related to the BPS in a sub-group of original participants and a second round of data collected.

Results: The majority of staff (n=86, 79%) agreed that residents required assistance with oral care and placed oral care (n=85, 78%) as a moderate to high priority. Only 57% of managers and 49% of nurses had received training in oral care. Most staff (79% of managers, 85% of nurses) were unaware of the NHS QIS BPS. Deficiencies in knowledge of key areas within the BPS were identified.

Between pre- and post-OHE training, significant differences were identified in prioritisation of oral care (p =0.009), perceived competence (p =0.005) and confidence giving advice (p =0.004). Following OHE intervention, knowledge of BPS protocol increased by 45%.

Conclusion: Knowledge of oral care provision by carers for home residents requires substantial improvement. An OHE training programme structured around the NHS QIS BPS demonstrated a measurable increase in levels of staff knowledge of oral care.

INTRODUCTION

The ‘elderly support ratio’ can be defined as the total number of working age citizens within a population divided by the number of those at pensionable age. As the number of dependent elderly people continues to increase within the United Kingdom,[1] the elderly support ratio is projected to decline from 3.35 in 2002 to below 2.2 by the 2050’s. Currently, there are approximately 450,000 occupied places in residential and nursing care homes and hospitals.[1] Since the Regulation of Care (Scotland) Act 2001 was introduced, there has been no legal difference between nursing homes and care homes. Within Scotland, both provide nursing care where required, depending on their personal specifications and flexibility of services. The terms ‘Nursing Home’ and ‘Care Home’ are therefore now obsolete, with all homes being referred to as care homes. The two are sometimes differentiated as Care Home (N) and Care Home (R). For the purpose of this survey, the homes involved have been referred to as ‘Care Home (N)’. To accommodate the care demands of a projected rise in elderly population, availability of places in care homes and hospitals would need to increase by about 151 percent, to approximately 1,130, 000 by 2051.[1] This likely disparity raises important questions for this population group with regards to access to an acceptable standard of care within such facilities.

It is recognised that people who utilise residential services place particular emphasis on certain features about the care and support they receive. Such features include being involved in decisions about their individual care requirements and being assisted by people who have received appropriate training.[2] In Scotland, the Health Care Commission governs training requirements for care home staff and dictates the appropriate ratio of trained to untrained staff for the service, which is reviewed at regular intervals. Nurses must be

registered with their regulatory body, The Nursing and Midwifery Council, and must maintain their standards and registration every 3 years. Those with responsibility for management of care homes must be registered with the Scottish Social Services Council and meet with their specified minimum training requirements.[3] Homes are required to provide new staff with a clearly defined training programme. Training plans should be annually reviewed for all staff, and homes must ensure that prerequisite skills for practical care provision are encompassed in training.[2]

Elderly patients are likely to suffer several oral problems including xersostomia, increased caries risk, advanced toothwear, poor levels of oral hygiene due to associated medical conditions, loss of natural teeth, compromised alveolar bone support for removable prostheses and ongoing periodontal disease.[4] Although a poor level of oral care is unlikely to be fatal, it can have a negative impact upon quality of life, the ability to eat, communication and general personal comfort.[5,6] Deficient oral care within care home residents is a long standing and widely recognised problem.[7,8, 9] It is also accepted that the quality of Oral Health Education provided by care home staff varies tremendously.[10] Prior to publication of the Best Practice Statement (BPS) 'Working With Dependent Older People to achieve Good Oral Health' by NHS Quality Improvement Scotland (NHS QIS) in May 2005,[11] there was a lack of guidelines on the subject. The release of this document has provided care homes with a target for providing the best and achievable standard of oral care provision for Scotland's elderly population. The statement places emphasis on the principles of patient-centred care that is consistent, cohesive, fair and cost effective. It aims to provide guidance in attaining and sustaining good practice. Staff are encouraged to work to their full potential, which NHS QIS hope will in turn stimulate learning and promote interdisciplinary team working. The statement is based on an agreed set of values

developed by the Scottish Gerodontology Community of Practice and is due for review in 2008, and every 3 years thereafter.

This survey primarily intended to determine the degree of dissemination of the NHS QIS Best Practice Statement to care homes (N) within the Glasgow area. In addition, the attitude, confidence and current training levels of care home (N) staff were investigated. Furthermore, knowledge levels of care home (N) managers and nursing staff in relation to oral care were assessed and compared to the NHS QIS BPS. Finally, the survey evaluated if Oral Health Educator (OHE) training had a positive effect upon care home (N) staff knowledge pertaining to the NHS QIS BPS.

METHOD

33 care homes (N) within Greater Glasgow were randomly selected by an internet search engine. An introductory letter was posted to these homes. The letter introduced the project and established arrangements for telephone interviews with three members of nursing care staff and manager of each home. Only registered nurses and the registered home manager were approached to take part in the study. This was to ensure that a valid comparison could be made between the staff involved. At this stage, there was deliberately no mention of the NHS QIS Best Practice Statement.

Subsequently, telephone interviews were conducted using a structured questionnaire (Appendix 1). In order to standardise techniques, the 4 individuals involved in data collection received calibrated training on interview techniques prior to their commencement. The first two sections of the questionnaire were designed to quantitatively measure various dimensions of oral health care attitudes and training of nursing care staff.

The third section was qualitatively designed to elicit levels of staff knowledge in relation to oral care. Qualitative questions were formulated to enable a comparison between staff knowledge and NHS QIS Best Practice Statement. A 'knowledge check-list', based upon the protocol for daily oral care (Appendix 2), was used as the template for knowledge assessment to facilitate direct quantitative assessment. The questionnaire and 'knowledge check-list' were designed to allow accurate comparisons of pre- and post-education knowledge from an Oral Health Educator (OHE). One mark was allocated per correct point mentioned from NHS QIS 'Protocol for Daily Oral Care'. The total 'score' for each participant was then calculated and averaged for all staff involved and then assigned a percentage. Nurses on duty at the time of telephone call, willing to take part, were asked to volunteer for interview.

Following the structured telephone interviews, an OHE undertook small group training sessions with the 3 members of the nursing staff and home manager within a subgroup of care homes (N) from the South Glasgow area (n=24). Training was centred upon providing knowledge based on the protocol for daily oral care within the NHS QIS BPS 'Working with Dependent Older People to achieve Good Oral Health'. Each training session was undertaken by the same OHE and lasted for 3 hours.

From this sub-group, a second round of anonymised data was then collected using the same members of research staff previously involved in data collection from the original care home (N) group. This data was collected within one month of OHE training for all individuals involved. Statistical analysis was performed on collected data using Excel (Microsoft Corporation, USA) and SPSS (SPSS Inc., Chicago, USA).

RESULTS

Of the 33 care homes (N) invited to take part in the study, 28 participated in data gathering. Data was collected from a total of 109 staff in these care homes (N). Non-participating homes advised that they were too busy to be involved. Subsequently, sub-group data analysis was undertaken on 8 care homes (N) involving 24 staff. Following OHE involvement, one nurse failed to complete the telephone questionnaire due to long term sick leave and 23 staff replies were analysed.

Requirements for the provision of oral care

When asked to express level of agreement with the statement 'All residents in your care desire assistance with oral hygiene procedures', where 1 represents strongly agree and 7 represents strongly disagree (Figure 1A), the majority of those surveyed (*n*=86) stated that they agreed that all their residents required assistance with oral care. Mean score of 2.71 (SD=1.802) for managers, and 2.25 (SD=1.563) for nurses. In comparison to the other daily duties requiring their attention, the majority of surveyed staff placed oral care in a moderate to high priority category (*n*=85). Mean score 5.39 (SD=1.227) for managers and a mean of 5.51 (SD=1.432) for nurses (Figure 1B).

Responsibility of healthcare givers in delivering oral care

When asked which members of the care home (N) team were primarily responsible for providing oral care (Figure 2A), 45% (*n*=79) of nurses stated this role was the responsibility of carers. Other most frequent responses for oral care provision included the dentist (19%, *n*=34) and resident (17%, *n*=30). Care home (N) managers also most commonly named carers as having primary responsibility for the oral care provision of residents (43%, *n*=28, Figure 2B). Similar to the surveyed nurses, 25% (*n*=16) of managers

considered dentists to be responsible for the oral care of residents and 17% (*n*=11) considered the resident responsible for their own oral care.

Training in oral health measures

Of those surveyed, 57% (*n*=16) of managers and 49% (*n*=39) of nurses stated they had been trained in provision of oral care. The majority of managers indicated they had received their training in the form of undergraduate lectures (38%, *n*=9). Other forms of training included undergraduate practical lessons (25%, *n*=6) or from a dentist (13%, *n*=3, Figure 3A). Of the nurses surveyed, 29% (*n*=19) had received training from undergraduate lectures, undergraduate practical lessons (23%, *n*=15), in-house (22%, *n*=15) or via an Oral Health Educator (12%, *n*=8) (Figure 3B).

Of surveyed care home (N) managers, the most common barriers to not having received appropriate training in oral care provision were the lack of availability for this in the home in which they worked (85%, *n*=11) (Figure 3C). The most frequently cited reasons for a lack of education in oral care by nurses who had not received formal training included training not being available in their care home (N) (74%, *n*=36) or that oral care had not been covered within the college/university curriculum (20%, *n*=10) (Figure 3D). The vast majority of surveyed managers (79%, *n*=22) and nurses (85%, *n*=67) were unaware of guidelines from the NHS QIS Best Practice Statement (Figure 3E).

Potential barriers to the provision of oral care

Most of the enrolled managers (82%, *n*=23) and nurses (76%, *n*=61) agreed or very much agreed with the statement that resident co-operation was a barrier to providing a suitable standard of oral care (Figure 4A). The majority of surveyed managers (79%, *n*=22) and

nurses (86%, *n*=69) stated they strongly agreed/ agreed that sufficient time was available to perform oral care for home residents (Figure 4B).

Knowledge of oral health care

When compared to the knowledge checklist compiled from NHS QIS's 'Protocol for Daily Oral Care', the average overall knowledge score for managers was 30% and for nurses, 37%. Particular shortfalls were identified with regards to knowledge of denture care, care of natural teeth, care of oral mucosa and care of a dry mouth (Table 1).

Group statistics performed on collected data did not reveal any statistically significant differences between either group for responses regarding attitudes, knowledge, competence or confidence in oral care procedures. As such, a manager with a poor knowledge or attitude towards oral care was likely to have nurses with a similarly poor knowledge and attitude in their team.

Intervention of oral health educator in care home (N) sub-group

Attitudes to the provision of oral care

A number of statistically significant differences were identified between respective cohorts before and after Oral Health Educator-based training. Significant increases were observed in level of priority given to oral care (p=0.009, mean rating pre-OHE 5.47, SD=1.99, mean rating post-OHE 6.30, SD=0.77, Figure 5A), self competence assessment (p=0.004, mean pre-OHE involvement score 2.43, SD=1.52, mean post-OHE 1.56, SD=0.44, Figure 5B) and confidence advising other staff in oral hygiene procedures (p=0.004, mean pre-OHE score 2.43, SD=1.52, mean post-OHE training 1.56, SD=0.44, Figure 5C).

Knowledge of oral health care provision

Prior to Oral Health Educator training, the overall score for staff oral care knowledge was a mean of 42%. Following training, oral care knowledge scoring rose to 82%. This represented a 40% increase in correct responses in oral care provision. After OHE intervention, particular improvements were identified in aspects of oral mucosa care, care of a dry mouth, care of resident's natural teeth and care of the edentulous person (no natural teeth) with dentures (Table 3).

DISCUSSION

Participation rate was high within both the initial survey group and sub-group population receiving OHE intervention. 85% of contacted nursing homes participated in the survey. Furthermore, 96% of those who undertook training by the oral health educator were available for the second round of data collection. In an attempt to ensure a standardised baseline level of education and knowledge in survey participants, only registered nursing staff and registered managers were approached to take part in the study. There are strict legislative controls, implemented by the Care Commission Scotland and Scottish Social Services Council, governing care home (N) staff. The Care Commission Scotland is obliged to regularly inspect and monitor care homes (N) with respect to levels of training and specified ratio of trained to untrained staff. In addition, care homes (N) invited to participate in this study were all required to employ at least one fully trained and qualified nurse to provide 24 hour on-call cover. The 5 care homes (N) who declined to participate in the survey, cited insufficient time as an issue. A lack of time was also mentioned as a factor preventing subsequent attendance at training events. A shortage of time was not identified by care home (N) staff as a factor in preventing oral care being undertaken for home residents.

Although carers were generally held responsible for the delivery of oral care, less than 50% of nurses said that they had received formal training in oral care provision. For several staff members, training in oral care measures had taken place up to 40 years previously. A similar lack of emphasis on oral health measures in nurse training has also been described in countries such as the USA and Sweden.[12,13] Population projections since the early 1980's have identified that the number of older people retaining at least some of their natural teeth will continue to increase.[14] In combination with increases in the elderly population in the UK,[1] this will place increased demands upon the delivery of oral care by care home staff. Assessment of surveyed participants' knowledge of oral care provision, compared to Knowledge Check Points for care home (N) staff contained within the NHS QIS 'Protocol for Daily Oral Care', revealed major deficiencies in current knowledge levels in the delivery of oral care (Table 1). NHS QIS Best Practice Statement places emphasis on promoting interdisciplinary team working. However, whether responsibility for oral care should be delegated to 'kitchen staff', as one nurse commented, is somewhat debateable.

Not only is good oral health important for quality of life, but it is also associated with general health. Poor oral care is a widely recognised problem and if left unattended may have wider implications. These include predisposition to conditions such as staphylococcal mucositis[15] or aspiration pneumonia.[16,17] Such adverse ailments are most commonly observed in debilitated patients, for example elderly residents in care homes. Furthermore, oral discomfort has been associated with poor nutritional status in incapacitated patients.[18] With an aging population retaining more of their natural dentition, it is concerning to establish that the standard of knowledge in oral care provision for the elderly within UK care homes (N) is sub-optimal. Of those staff surveyed, only 52% knew how to correctly care for a dry mouth prior to OHE training (Table 4). Of particular concern, 87.9% of care

home (N) staff (*n*=20) advised that lemon and glycerine should be used to alleviate symptoms of xerostomia. This would adversely lead to severe erosion in a dentate patient suffering from xerostomia.

It is also worrying that with increased tooth retention in the elderly cohort, surveyed staff had such a poor knowledge relating to care of the natural dentition. The use of fluoride toothpaste, an essential component in the prevention of dental caries, was mentioned by only 1 member of staff prior to OHE involvement. After Oral Health Educator training, all staff recommended the use of fluoride toothpaste (*n*=23, 100%) (Table 4). Potential use of a powered toothbrush as opposed to a manual, for those with manual dexterity issues, was mentioned by only 2 of the surveyed staff (8.7%). It is somewhat disconcerting that this figure rose to only 8 (34.8%) after OHE input (Table 4).

Healthcare and management staff involved in this study rated oral care as a high priority. In contrast, their displayed knowledge in the provision of oral care was revealed to be severely deficient. Not only is training in oral care both desired and required by care staff,[8] it has also been demonstrated to be effective in a number of studies.[19,20,21,22,23] Indeed, the important roles that education and training in oral health care has upon improving knowledge levels, attitudes and participants' ability to undertake tasks such as tooth-brushing have previously been illustrated.[24,25,26]

In the care home (N) subgroup that received OHE-based training, knowledge, attitude and confidence in providing and advising on oral care were significantly improved. Moreover, feedback from those within the trained subgroup was very positive. Many staff stated they hoped such training in oral care would become available on a wider and more regular basis. This reinforces the requirement to ensure the provision of adequate training for all

care home staff, particularly if homes are to comply with Personal Social Service's National Minimum Standards (NMSs).

Although the majority of staff recognised the requirement to clean dentures, there remained clear shortcomings related to knowledge of denture care in the surveyed care homes (N) (Table 1). Denture marking has several advantages for the denture wearer. Most fundamental of these is denture identification, which facilitates the distinction of dentures between different wearers. This is particularly applicable for subjects in a care home environment. Denture identification marking would also enable the individual's dentures to be chronologically categorised according to the time of construction. This would be helpful in both primary and secondary care settings, particularly during the clinical assessment when considering denture replacement.[27] However, care home (N) staff were unaware that this is one of the key guidelines in the NHS QIS Best Practice Statement 'Evidence-based Protocol for Daily Oral Care'. In relation to care of the edentulous patient with dentures, the BPS expressively states that staff should 'ensure that dentures are marked with the person's name (for example, "Identure" Denture Marking System, Geri Incorporated)'. Worryingly, this lack of knowledge was evident not only prior to, but also following OHE intervention (Table 4).

Unfortunately, current evidence to suggest that patient or staff training by Oral Health Educators significantly enhances the oral care of population groups in the long-term is weak .[28] Nevertheless, our study supports previous research indicating the positive benefits that Oral Health Educators have upon improving knowledge of nursing personnel in provision of oral health within care facilities.[20] Indeed, these positive findings are in agreement with outcomes following the utilisation of OHE's within other parts of the

UK.[26] In contrast, a recent study has demonstrated little meaningful clinical improvement in oral health of residents in long term care facilities following nurse educator training.[28] Further research is therefore necessary to evaluate whether the increased knowledge demonstrated within our care home (N) cohort translates into long-term clinical improvements in the oral health of the elderly in residential care.

CONCLUSION

This investigation has identified that there continues to be inadequate training of staff within UK care homes (N) for the provision of appropriate oral care to the elderly population utilising such facilities. There was poor dissemination of NHS QIS Best Practice Statement 'Working with Dependent Older People to Achieve Good Oral Health' and a lack of knowledge towards the content of this document. Of importance, this study demonstrated the positive impact that an OHE has upon staff attitudes towards, and knowledge of, effective oral care procedures. This evidence may help form a basis for the delivery of future training to care home staff and should be considered when planning induction programmes for new care home staff members and at staff training review meetings. NHS QIS's BPS has been specifically developed to provide an achievable basis for good practice in oral care provision. Inclusion of the practices described in the 'Protocol for daily Oral Care' in resident care plans and staff training is designed to ensure the delivery of a more consistent and cohesive level of care. Based on the findings of this study, a training programme structured around these guidelines has been demonstrated to produce a measurable increase in levels of staff knowledge in administering oral care measures. However, the long-term effect of OHE training of care staff upon the clinical status of elderly residents remains to be established.

ACKNOWLEDGEMENTS

The authors would like to thank Ray MacAndrew, Tara Dunseith and Sheila Hunter for help in setting-up the study. The contributions from Nicola Cross, Laura Colgan and Pamela Yule in data collection are greatly appreciated. The authors also thank Petrina Sweeney and Eilidh MacRae for assistance in proof reading the manuscript and their helpful feedback.

IN BRIEF

- There is an increasing number of dependent elderly people in the UK requiring nursing home care
- Elderly people are likely to suffer from a number of oral problems
- Standards in knowledge of oral care provision for the elderly within UK care homes has been identified as sub-optimal
- Dissemination of and knowledge related to NHS QIS best Practice Statement was poor amongst surveyed care home (N) staff
- A number of barriers to the provision of oral care were identified
- Oral health Educator training based upon NHS QIS ‘Protocol for daily Oral Care’ was demonstrated to significantly improve knowledge and attitudes of surveyed care home (N) staff

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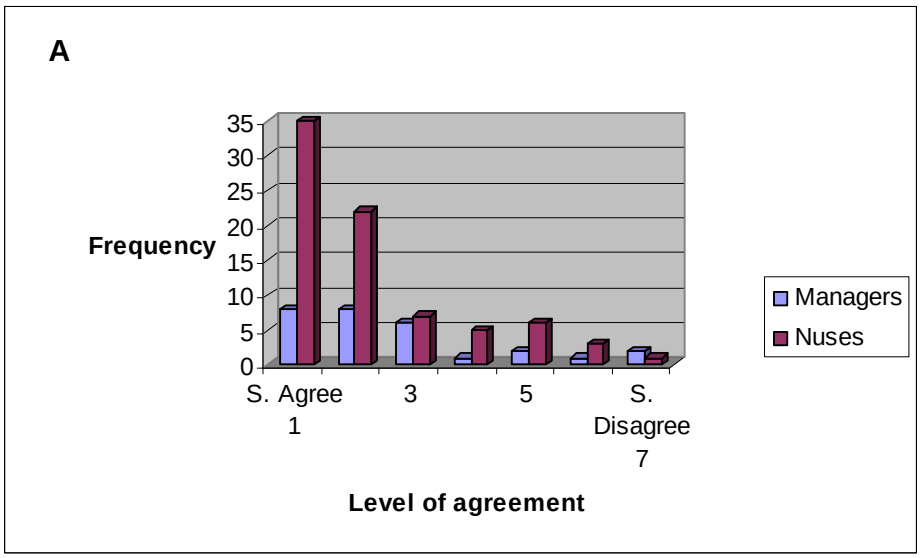
Figure 1 Requirements for the provision of oral care within nursing homes. A) Staff opinions that nursing home residents desired assistance with oral hygiene procedures, B) Priority given to oral care by staff in comparison to other healthcare duties.



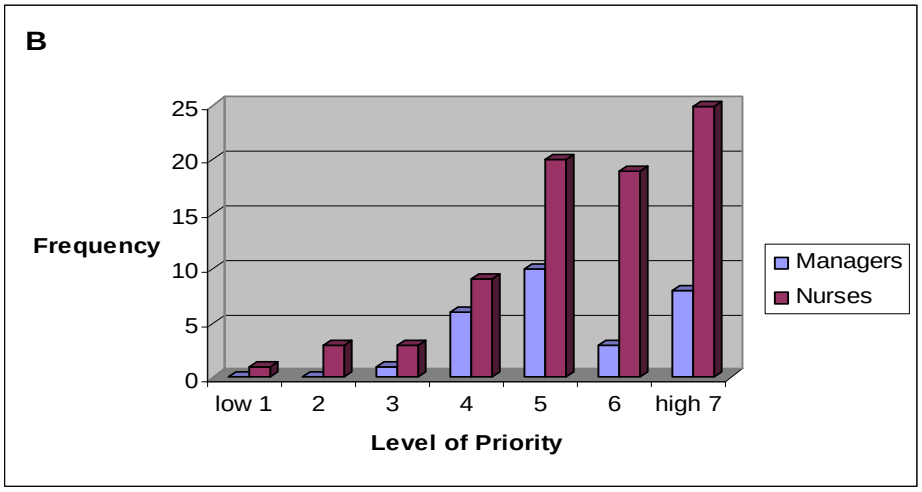
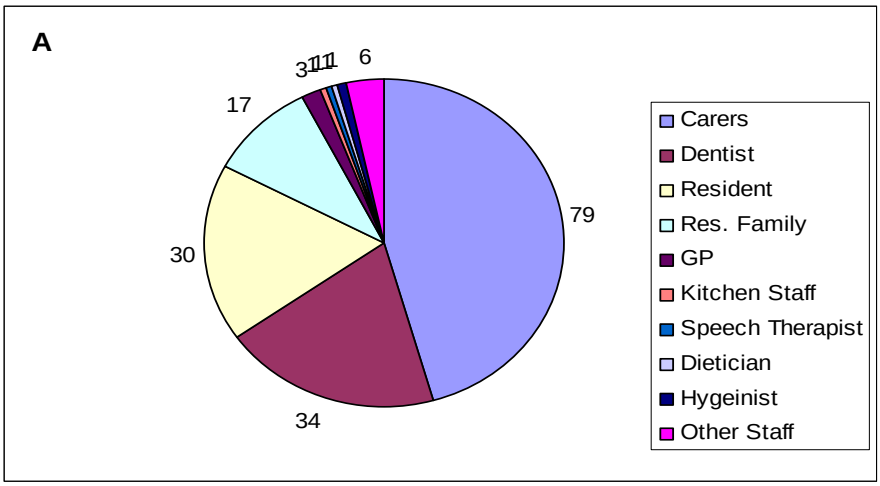


Figure 2 Responsibility of Healthcare staff in delivering oral care. A) Members of the care team that nurses held primarily responsible for oral care provision, B) Members of the care team nursing home managers viewed primarily responsible for oral care.



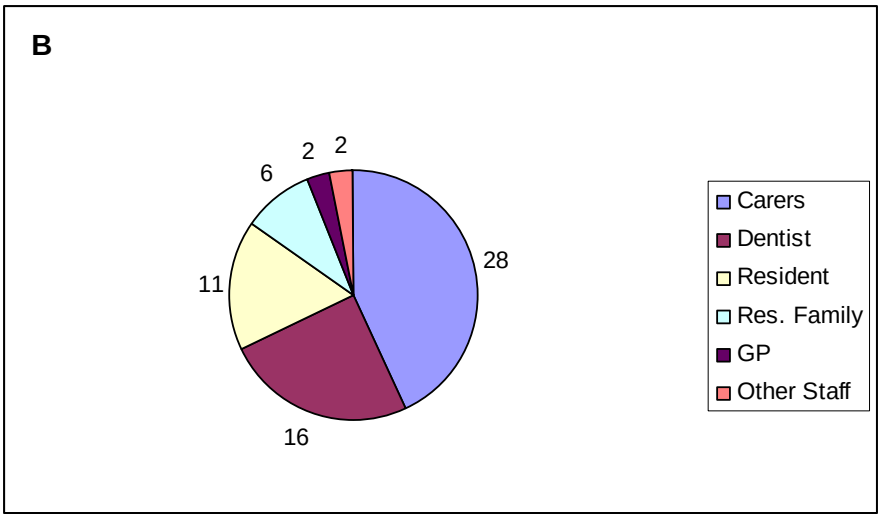
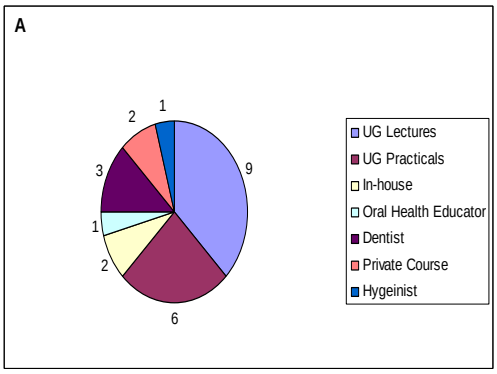
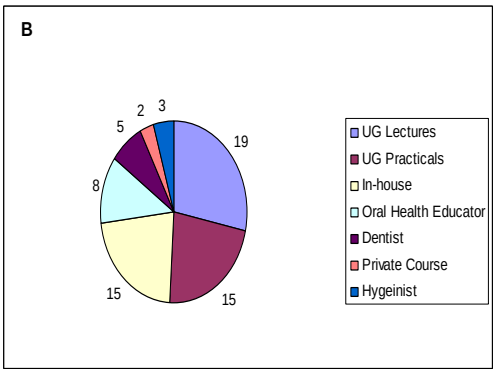
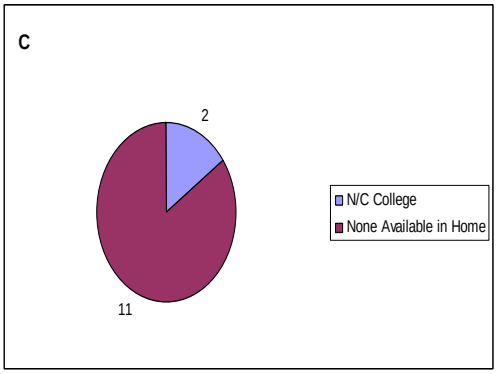
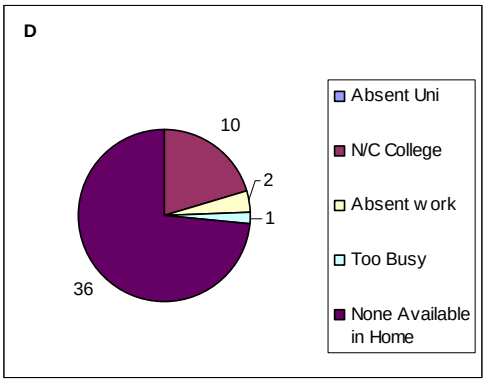


Figure 3 Training in relation to oral care provision. A) Methods by which managers had received training in oral care provision, B) Methods by which nurses had been trained in provision of oral care, C) Reasons for lack of training in oral care given by surveyed managers, D) Reasons for lack of training in the provision of oral care by nurses who had not received previous training E) Home Managers and Nurses awareness of QIS Best Practice Statement (BPS). (N/C represents not covered).









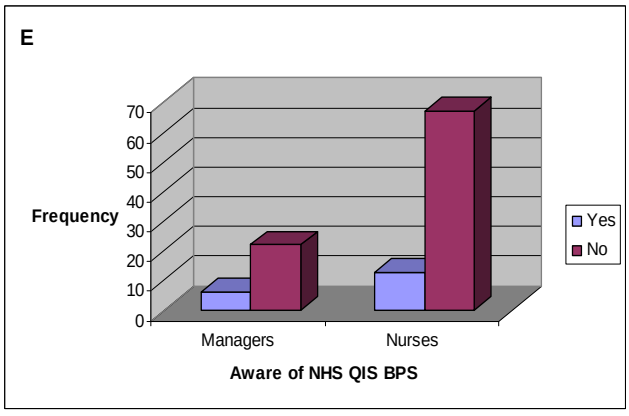
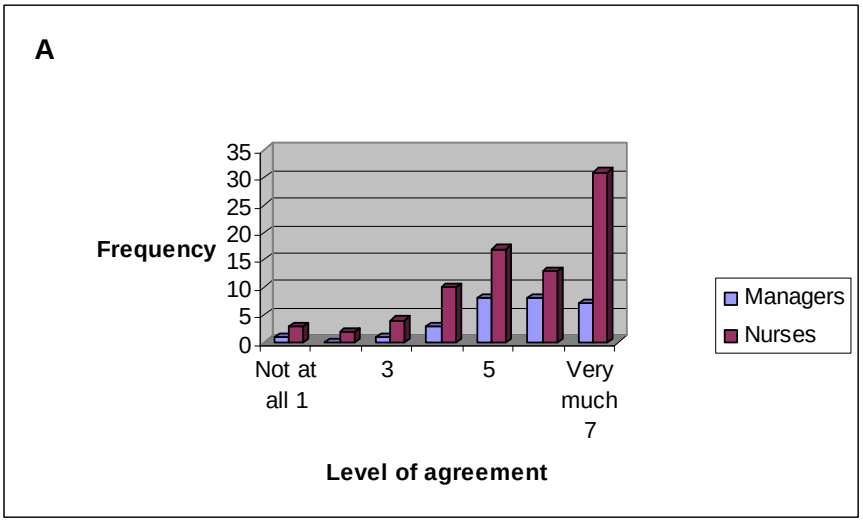


Figure 4 Potential barriers to the provision of oral care. A) Agreement of managers and nurses that resident co-operation was a barrier to oral care, B) Agreement of managers and nurses that sufficient time was available to perform oral care procedures.



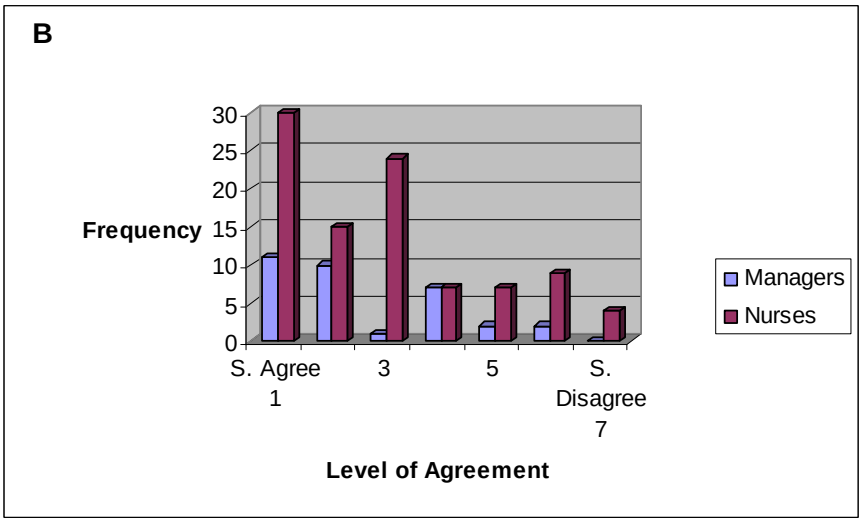


Table 1
Overall Scores for knowledge related to NHS QIS BPS Protocol for daily oral care

Care of:	Managers	Nurses	Combined
Denture Overall	73/252 (29%)	249/720 (35%)	322/972 (33%)
Natural Teeth Overall	45/140 (32%)	83/400 (21%)	128/540 (24%)
Oral mucosa Overall	24/84 (31%)	71/240 (31%)	98/324 (30%)
Dry Mouth Overall	29/56 (52%)	67/160 (42%)	96/216 (32%)

Table 2
Knowledge of specific aspects of oral care compared to NHS QIS BPS 'Protocol for Daily Oral Care'

Denture Care	**Managers**	**Nurses**
Denture marking	0 (0%)	1 (1%)
Acrylic dentures in NaOCl	22 (79%)	68 (85%)
Clean with brush & running water	20 (71%)	54 (68%)
Fixative if required	1 (4%)	2 (3%)
CoCr dentures to be soaked in Chlorhexidine not NaOCl	0 (0%)	3 (4%)
Care of Natural Teeth	**Managers**	**Nurses**
Fluoride Toothpaste	5 (18%)	20 (25%)
Powered toothbrush if preferred	2 (7%)	2 (3%)

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Figure 5 Effect of Oral Health Educator (OHE) intervention in nursing home sub-group. A) Priority given towards oral care by staff before and after OHE intervention, B) Perceived levels of staff competence in provision of oral care measures to residents, C) Perceived levels of staff confidence in giving advice on oral care to other healthcare staff. (Results are displayed as combined totals of nurses and managers pre- and post-OHE intervention)

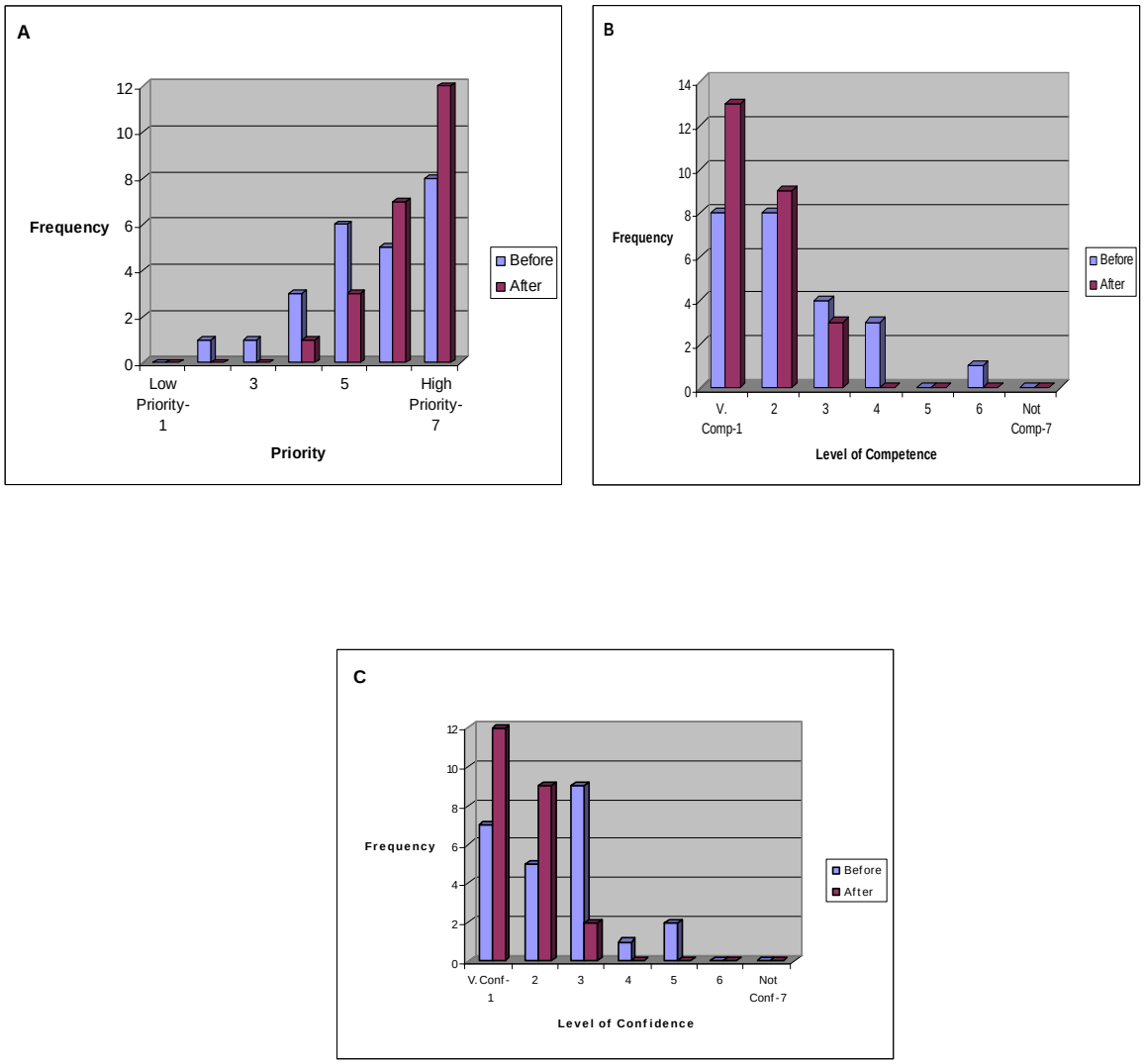

Table 3
Sub-group knowledge of oral care compared to NHS QIS BPS 'Protocol for Daily Oral Care'

Care of	Managers	Nurses	Combined
Oral Mucosa Total	23/69 (33%)	63/69 (91%)	40 (58%)
Dry Mouth Total	24/46 (52%)	46/46 (100%)	22 (48%)
Natural Teeth Total	35/115 (30%)	87/115 (76%)	52 (46%)
Denture Total	75/207 (36%)	149/207 (72%)	74 (36%)

Table 4
Sub-group knowledge of specific aspects of oral care compared to NHS QIS BPS 'Protocol for Daily Oral Care'

Care of Natural Teeth	**Before**	**After**	**Difference**
Fluoride Toothpaste	1 (4%)	23 (100%)	22(96%)
Powered toothbrush if preferred	2 (9%)	8 (35%)	6 (24%)
Denture Care	**Before**	**After**	**Difference**
Denture marking	0 (0%)	0 (0%)	0 (0%)
Care of Dry Mouth	**Before**	**After**	**Difference**
Sips of water/saliva subs.	23 (100%)	23 (100%)	0 (0%)
High Fluoride Toothpaste	1 (4%)	23 (100%)	22 (96%)

Appendix 1

Questionnaire

Attitudes

1) With regards to the daily duties required of nursing care staff, please indicate the level of priority given to oral care:

Please indicate the number which applies:

Low Priority 1 2 3 4 5 6 7 High Priority

2) I find the task of denture or tooth cleaning:

Unpleasant 1 2 3 4 5 6 7 Pleasant
Boring 1 2 3 4 5 6 7 Exciting
Unenjoyable 1 2 3 4 5 6 7 Enjoyable

3) In balancing daily duties, sufficient time is available for me to perform oral care:

Strongly Agree 1 2 3 4 5 6 7 Strongly Disagree

4) If the care home becomes short staffed, it is possible that oral care is not always carried out:

Strongly Agree 1 2 3 4 5 6 7 Strongly Disagree

5) Do you consider lack of resident co-operation a barrier to performing oral care?

Not at all 1 2 3 4 5 6 7 Very Much

6) All residents in your care desire assistance with oral hygiene procedures:

Strongly Agree 1 2 3 4 5 6 7 Strongly Disagree

7) All residents in my care require assistance with denture/tooth cleaning:

Strongly Agree 1 2 3 4 5 6 7 Strongly Disagree

8) Who do you consider to be responsible for residents oral care (please indicate all applicable options):

Staff Carers Dentist
Resident Resident's Family
Other staff member (please indicate their title)

Training

9) Have you received any training in oral care?

Yes (If yes proceed to Q10) No (If no proceed to Q11)

10) Please indicate all applicable options:

Undergraduate Lectures
Undergraduate Practical Lessons
In-House training
With oral health educator
With dentist
Other (please indicate whom)

11) If no then please indicate why:

Absent from college/university
Not covered as part of college/university course
Absent from work
Too busy in the care home to attend
No training available in the care home
Other (please indicate)

12) Please indicate the level of adequacy you feel with regards to your current level of training:

Very adequate Adequate Not sure Inadequate Very Inadequate

13) Please indicate how confident you feel in performing oral care procedures for residents:

Very confident 1 2 3 4 5 6 7 Not Confident

14) Please indicate how competent you feel in performing oral care procedures for residents:

Very competent 1 2 3 4 5 6 7 Not Competent

15) Please indicate how confident you feel in giving advice regarding oral care procedures to other members of staff:

Very confident 1 2 3 4 5 6 7 Not Confident

16) Please indicate how confident you feel in giving advice regarding oral care procedures to residents:

Very confident 1 2 3 4 5 6 7 Not Confident

17) Are you aware of the document 'Working with Dependant Older People to Achieve Good Oral Health' best practice statement?

Yes (If YES please proceed to Q18)

No (If No please proceed to Q19)

18) Please indicate the applicable option regarding the communication of the best practise statement:

Read the document in house
Discussed with colleagues
Recall seeing the document but not read it
Heard mention of it

19) Can you describe to me how you would care for a resident's lips?

20) Can you describe to me how you would care for a resident who has no natural teeth and dentures?

21) Can you tell me the difference between care regimes for plastic dentures and dentures with metal parts?

22) Can you describe to me how you would care for a resident's natural teeth?

23) Can you describe how you would care for the soft tissues of a resident's mouth?

24) Can you describe how you would care for a resident with a dry mouth?

25) What is the frequency of dental examination required for?

A resident with no natural teeth_____
A resident with some/all remaining natural teeth_____
Don't know_____

Appendix 2

Knowledge Check Points for Care Home (N) Staff

Taken from 'Working with Dependent Older People to achieve Good Oral Health' 'Protocol for Daily Oral Care' QIS (May 2005)

Applied to Questions 19-25 of Questionnaire

Q19) Care of Lips

1. Clean using water-moistened gauze
2. Protect with lubricant (e.g. Oralbalance gel)

Q20) Care of the person who is edentulous (no natural teeth) with dentures

1. Dentures marked with the persons name (e.g. "Identure" Denture Marking System, Geri Incorporated)
2. Dentures left out at night
3. Plastic dentures soaked in sodium hypochlorite solution
4. Dentures cleaned using individual brush under running water
5. Dentures rinsed after meals
6. Small quantity of fixative used if required
7. Fixative cleaned off and replaced before meals and cleaned off at night

Q21) Difference between care regimes for plastic dentures and dentures with metal parts

Dentures with metal parts should be soaked in chlorhexidine rather than sodium hypochlorite solution

Q22) Care of Natural Teeth

1. Teeth cleaned twice daily and after meals
2. Fluoride toothpaste
3. Soft toothbrush
4. Corsodyl mouthwash or spray or gel if additional plaque control required
5. Patients happy using powered toothbrush to continue with this

Q23) Care of Oral Mucosa

1. Inspect in good light
2. Report unusual appearances

3. Clean using water moistened gauzed fingers, sponge sticks, TePe special care toothbrush or baby tooth brush

Q24) Care of the person with a dry mouth

1. Oral lubrication in the form of sips of water or spray or the use of mucin-based artificial saliva
2. Use of high dose fluoride toothpaste

Q25) Frequency of dental examination required for:

A resident with no natural teeth: Minimum of every 12 months
A resident with some/all remaining natural teeth: Minimum of every 6 months (ideally more frequently)

Recall interval should be individually assessed and determined for each patient by the Dentist.