



Community Consultation of Families with Young Children about a New dental Service Centre in Southeast London

Neda Hussaini Nasab¹, Jenny Gallagher MBE^{2*}

¹Dentist, Mixed practice, London

²Dean for International Affairs, King's College London Dental Institute, London

Submission: : November 28, 2016; **Published:** December 13, 2016

***Corresponding author:** Jenny Gallagher MBE, Dean for International Affairs, Head of Population and Patient Health, Newland Pedley Professor of Oral Health Strategy, Honorary Consultant in Dental Public Health, King's College London Dental Institute, Denmark Hill Campus, Bessemer Road, London, Tel: 02032996164; 02032995171/3481; 02032994454; Email: jenny.gallagher@kcl.ac.uk

Abstract

Objectives: To engage families with young children and empower them to inform service provision; explore the views and expectations of families with young children in West Norwood area of how dental services may be best provided at the West Norwood Health and Leisure Centre (WNHLC); explore barriers to dental care, uptake and use of dental services.

Research design: Cross-sectional questionnaire survey.

Participants: 1,016 parents/guardians with children aged seven and under.

Main outcome measure: Willingness to access the dental service.

Results: An overall response rate of 24% (246/1016) was achieved. The majority (72%, n=178) were unaware of the dental services at the Centre. Lack of convenient appointment times (43%, n=106) was the most common barrier to accessing dental care reported by families. Approximately 48% of parents indicated their willingness to bring their children to the WNHLC, the majority of them were NHS users (75%, n=89, OR=1) who attended the dentist occasionally (65%, n=77, OR=4.8, p<0.01). Essential facilitating factors were friendly dental care providers (81%, n=203), ease of getting appointments (76%, n=186) and suitable opening hours (74%, n=183).

Conclusion: The results of this study signified the need of collaboration with local settings to increase awareness about its dental services. The uptake of service would depend upon factors such as its opening hours, ease of getting appointments, having a patient-friendly dental team. The results of the study will inform future dental service provision at the Centre in the light of NICE guidelines (NICE, 2008).

Keywords: Outreach; Skill-Mix; Access; Barriers; Communication; Dental services; NHS

Introduction

Access to dental services is a major policy and public concern in the UK, which is considered as "one of the contributing factors for improvement of oral health" [1,2]. Differences in oral health and oral health service utilization exist at all levels for various reasons ranging from psychosocial characteristic of individuals to regional deprivation [3,4] (Nuttall, Freeman, Beavan-Seymour, Hill). It is evident from local studies in England that there is inequity in access in deprived areas of London [5,6,7].

The borough of Lambeth is the fifth most socially and economically deprived borough in London and distinctive in terms of its young and dynamic population, ethnic diversity and a highly mobile population (Census Information Scheme, 2012 & Trust for London and New Policy Institute, 2010-2014). The

oral health needs among pre-school children in local children's centers are high [8]. Despite availability of free dental services to children and more equitable dental services for adults through the National Health Service in the UK, health service data reveals lower access rates in Lambeth than London and England [9,10].

Numerous attempts to address inequity in access to dental services by reorienting dental services to ameliorate oral health inequalities [11]. The WNHLC is one of the initiatives of the local authorities in partnership with the NHS to improve health and wellbeing of the residents in the West Norwood area of south Lambeth (West Norwood News, 2009). The dental service at the WNHLC provided as a part of King's outreach programme, is perceived as an opportunity that will serve the local community by providing primary dental care in holistic way.

The high need for dental service and low level of service uptake, as in the West Norwood area, reflects a poor 'fit' between the patient and health care system [12]. Community engagement in planning, development and management of health related activities that affect them have been a strategic recommendation. There is evidence that engaging communities in service design and delivery empowers them and strengthens community cohesion making health policy initiatives more sustainable (NICE, 2008). Therefore we set out to assess the families' perceptions of barriers in accessing dental services and the factors that would motivate them to bring their children more often, thus enabling prevention as well as treatment services [10].

The aim of the project was to explore the views of families with young children in order to ascertain their expectations of how dental services may be best provided at the WNHL, with a view to informing the structure and delivery of dental services at this site.

Methods

Ethical approval was granted by King's College London Research and Ethics Committee (Ref number BDM/12/13-77). Based on the local data, children below seven years were included in the sample [8]. Initially, seven primary schools and four children's centres in the West Norwood area from Lambeth's Local Authority website [10] within a radius of one mile from the WNHL were approached and invited to participate in the study. Five primary schools and one children's centre participated and distributed questionnaires to 1,016 parents and guardians of children aged five to seven years.

An initial approach with the gatekeepers was made through a written invitation and promotion was undertaken through posters and newsletters. The parents/guardians were given the questionnaire with an information sheet by the class teachers in an anonymous envelope. The information sheet contained detailed information about the study and emphasized voluntary and anonymous participation. Attempts were made to enhance the response rate by approaching the schools via reminder letters, emails and phone calls and pens were given as an incentive and extra questionnaires were kept in each school (Dillman, Smyth, Christian, 2008).

A two-page questionnaire was derived from validated questions from the Child's Dental Health Survey 2003 [3]. Questions on quality of dental care and barriers were derived from the local surveys [8,13]. The questionnaire consisted of mainly close-ended questions that derived information about the awareness of the Centre and its dental service, socio-demographic features, dental service usage, barriers, preferences, etc. The final open-ended question requested any suggestions for the dental service at the Centre. Only 246 parents/guardians returned completed surveys to their respective class teachers. However, this number was considered adequate since a calculated sample size with 80% power at 5% level of significance was 84 to test the proportion of parents/guardians willing to bring their

children, using the chi square test. A multivariate regression analysis was used to assess factors independently associated with willingness to bring children to the centre. The regression model was adjusted for variables such as the awareness of the WNHL and its dental service, child's and respondents' attendance pattern, child's and respondents' type of dental care, influence of dental students on the respondents' decision to avail the service. Quantitative data was analysed using SPSS software whilst responses to open question were analysed using simple thematic framework methodology.

Results

Response

Out of the eleven institutions targeted, five primary schools and one children's centre agreed to participate in our survey. A response rate of 24% (range 17% to 80% at school level) was achieved.

Socio-demographic characteristics as reported by the respondents

The majority of parents (92%, n=225) and children (54%, n=133) were female. The average age of child was six years ranging from one to nine years? The presence of siblings was identified by 32 respondents (12%). In terms of ethnicity, a majority of the parents identified their children as White (53%, n=131) followed by Black (21%, n=52) and multiple/mixed (20%, n=49), Asian (5%, n=11) and other (1%, n=3) ethnic groups. Here in after, respondents will be referred to as parents.

Reported dental attendance patterns and type of dental care received

In response to questions about dental attendance patterns, it was reported that 47% parents (n=116) and 64% of their children (n=158) attended a dentist regularly. A further 31% parents (n=76) and 25% children (n=61) reported occasionally, while 20% parents (n=50) and 11% children (n=27) were reported as attending only when in trouble. There was a significant association between child and parental attendance patterns ($p < 0.001$).

When asked about the type of dental service used, out of 246 parents, 71% parents indicated that they received NHS care (n=174) that was either paid for (40%, n=99) or free (31%, n=75). On the other hand, a slightly higher proportion of 79% children (n=193) were reported as being provided NHS dental care. Furthermore, 17% parents (n=41) utilized private dental care out of them 40% (n=16) reported utilizing NHS dental care for their children. A notable proportion of 13% children (n=32) were reported as utilizing private dental care

Reported awareness about west norwood centre and its dental service

With regards to the awareness of WNHL, 51% parents (n=125) were aware about the Centre while the majority (73%, n=178) had no perception about its dental service as reported.

Of the 125 parents who were aware of the centre, 52% (n=65) had no knowledge of its dental wing.

Willingness to bring child to the west norwood centre’s dental service and influence of supervised dental students on decision to bring their child

Overall, 48% (n=119) of parents indicated a willingness to bring their child to the centre whilst 36% (n=89) were unsure about the Centre or required more information. Of the 119 parents who reported that they would bring their child, the dominant ethnic groups were White (46%, n=55), Black (27%, n=32) and of mixed ethnicity (19%, n=23). The results suggested

that among those who showed willingness to bring their child, 75% (n=89) of parents and a higher proportion of 82% children (n=97) were NHS users. There was significant association between the child’s ethnicity (p<0.01), child’s dental attendance (p<0.05) and parental dental attendance (p<0.001) and their willingness to visit the Centre with Whites, parents and children attending occasionally or only in trouble identifying that they were more likely to use the service. Less than half of the parents (44%, n=107) indicated that the provision of dental treatment by dental students at the centre would not influence their decision to visit the Centre as shown in Table 1.

Table 1: Multivariate analysis of willingness or parents to bring children to the WNHLc.

		Odd’s Ratio	P-value	95% Confidence Interval
West Norwood Health and Leisure Centre Awareness	Aware (n=125)	0.5	0.2	0.2-1.4
Dental Service Awareness at Centre	Aware (n=68)	1.3	0.6	0.4-3.3
Child’s Dental Attendance Pattern	Occasional/Only in trouble (n=88)	2.3	0.1	0.8-6.2
Child’s type of dental care received	NHS (n=193) (Ref)	1		
	Private (n=32)	0.3	0.2	0.1-1.6
	Dental Hospital / Community Dental Care (n=16)	4	0.1	0.8-19.7
Respondent’s Dental Attendance Pattern	Regular (n=116)	1		
	Occasional / Only in trouble / Never been to a dentist (n=129)	4.8	0.001	1.9-12.0
Respondent’s type of dental care	Paid NHS (n=99) (Ref)	1		
	Free NHS (n=75)	0.8	0.7	0.2-2.5
	Private (n=41)	1.6	0.5	0.3-7.2
	NHS and Private (n=19)	0.8	0.8	0.1-4.1
	Unsure/ Undisclosed (n=10)	0.2	0.2	0.02-2.6
Influence of supervised dental students on willingness of respondents’ decision to bring their children to the dental service at the Centre	Yes	1.3	0.5	0.5-3.2

Reported reasons for delay to access dental care for children

The lack of convenient appointment time was the most important barrier to take their children to the dentist reported by the parents (43%, n=106). A significant association was found between lack of convenient appointment time and willingness of parents to bring their child to the Centre (p<0.01) with the parents most willing to bring their child to the centre reporting the lack of convenient appointment time as a barrier to care.

Figure 1 displays responses to what are the important features of a quality dental service for children. The six key

features showed agreement, having a friendly dental care provider being the most important issue. Parents were asked about their preferred time to visit a dentist. The majority of the parents indicated that after school followed by weekends and school holidays are the most appropriate times for their children to visit a dentist. The parents were asked to choose from a range of options on how, and where, the Centre’s dental service could best promoted the two families in the area who do not have a dentist. The vast majority of the parents endorsed advertisement at the schools (87%, n=214) followed by GPs (74%, n=183) and children’s centres (63%, n=154) as shown in Figure 2.

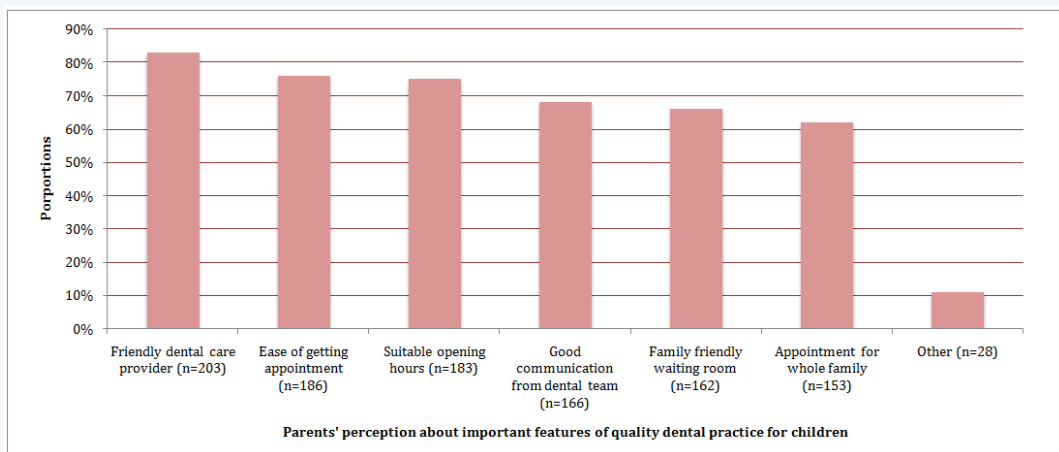


Figure 1: Parents' perceptions about important features of quality dental practice for children.

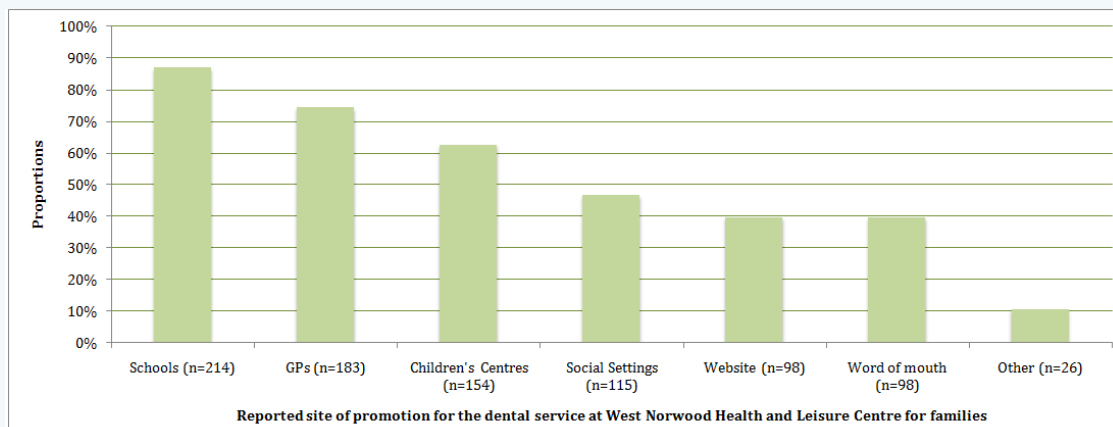


Figure 2: Reported site of promotion for the dental service at West Norwood Health and Leisure Centre for families.

Parental suggestions

A final question was an open question regarding anything else the respondents would like to suggest as to how the dental service at the West Norwood Health and Leisure Centre could best serve the local families. This accounted to 25% (n=61) of the total responses.

Maxwell's dimensions of quality, has been widely used to evaluate and assess the quality of health services [14]. The comments and suggestions of parents were in line with Maxwell's dimensions. Of all the dimensions of quality, 'accessibility' was predominately evident in the responses. The most repeated theme that emerged in accessibility were opening hours, ease of getting appointments, online registration, and special provision for children with learning disability, advertisement to increase awareness about the availability of the service in Norwood. In relation to 'relevance' of the dental service, there was a standard suggestion for the centre to emphasize on preventative services and oral health awareness through schools and children's centres via seminars, workshops, lectures, etc. 'Acceptability' mainly was apparent in terms of accepting supervised dental students as

the primary dental care provider. Areas of concerns regarding supervised dental students emerged as duration of treatment, experience in handling children, and change of provider in every visit, maturity level and confidence linked to anxiety of respondents. There was a clear demand for transparency of personnel including need of trained and experienced supervisors along with a sufficient workforce through means of dental auxiliaries. Comments in relation to 'equity' were raised in relation to acceptance of adults at an affordable rate. The parents recommended use of patient-friendly aids such as online booking system, text reminders to increase the 'effectiveness' of the dental service. Adequacy of staff was highlighted as an important criterion to increase the 'efficiency' of services.

Discussion

The latest report on Children and Young People's Health (2014) recommends improvement in oral health outcomes and reduction in oral health inequalities by putting families with young children at the heart of commissioning [10]. This study gave an opportunity to understand the nature of the service users in terms of socio-demographic characteristics, their

barriers in accessing dental care and the potential areas that need to be considered in service design and capacity building at the new centre.

In this study, the majority of the respondents were females. The gender profile of the children in the study sample was identical to Lambeth's general children population with 51% female and 48% male (Lambeth First 2011). In terms of ethnicity, the sample showed similar characteristics to the Lambeth population with the maximum number of respondents classifying themselves as 'white' followed by 'black' and 'multiple' ethnic groups. The willingness to use the new centre showed variations with respect to ethnicity, respondents classifying themselves as 'white' being more willing to use the dental service at the new centre.

The majority of the parents and their children were users of the NHS dental care, which were similar to the results from the national survey. Additionally, similarity in results to the national surveys was evident in terms of dental attendance patterns; the majority of the parents and their children reported visiting their dentists for regular check-ups (Morris et al. 2006; Office for National Statistics 2011). This finding may be a result of response bias as a questionnaire approach may have filtered out the ones who are less likely to visit a dentist or respond to a survey because evidence suggests that Lambeth has low uptake of dental care [6, 8-10]. There could also be two other possibilities in that the questionnaire attracted pro-active parents or the parents genuinely attend the dentist regularly as reported (Benett 2013).

Parental and child's attendance patterns were seen to be strongly associated with each other which is similar to findings from the national survey (Morris et al. 2006). As reported by other studies, in this population the parental perception of dental need predicted their dental attendance [15,16]. This study also showed that there was an association between parents' attendance pattern and their willingness to bring their child to the new centre's dental service. Those being non-regular attenders reported they were more likely to use the dental service at the centre. This may have an positive impact on reducing oral health inequalities as evidence shows that oral health and associated problems are associated with attendance pattern [17] (Richards & Ameen 2002).

This study showed that, according to their parents, the majority of children were reported to have had no recent dental problem. These findings do not necessarily suggest absence of dental problems but may be a result of 'social desirability' or lack of awareness of the child's oral health as highlighted in previous studies [13] (Sjöström & Holst 2002).

A significant relation between the age of the child and the time since the last dental visit was observed, which was more pronounced in the 5-7 age groups. Various reasons may contribute to this finding. One may be that decay in deciduous

molars is more common in this age group as highlighted in other studies (Levine, Pitts, Nugent 2002; Milsom, Blinkhorn, Tickle 2008).

In terms of barriers to access to dental care for their children, the study highlighted that lack of convenient appointment times was the most common difficulty faced by the parents. In addition, parents being busy, failure to find a dentist followed by fear of cost were also found to hinder the use of dental service. These findings confirm results from previous researches done in the area [5,8,13,18]. In response to the most convenient time to bring their children, there was a definite preference of having appointments after school, at weekends and during school holidays. Finally, in terms of defining a quality dental practice for children, it was found that a child-friendly dental care provider with ease of getting appointments and suitable opening hours are important factors that need to be considered, which are in parallel to previous research evidence [19,20].

With regards to dental care being provided by dental students, there was a mixed response with less than half of the parents approving the concept, which was similar to the findings of another recent local study [19]. Suggestions in terms of necessity of mandatory supervision of the students along with issues linked to the experience and level of expertise were made.

The barriers as well as preferences suggested by the parents are key features that need to be considered while planning the service delivery at the new centre. An area that will need to be clarified is the discrepancy between preferred time for appointments and the working hours of the dental students. Traditionally dental students have provided care during normal 9-5 office hours, Monday to Friday. It should also be born in mind that after school is not always the best time to treat children as they may be tired after a day at school. However, Saturday opening may also be a consideration as the health and wellbeing centre will be open seven days a week (Swider & Valukas 2004).

Furthermore, awareness of the centre and its dental services was relatively low. However, it may be suggested that this study might have had the positive effect of raising awareness of the dental service at the centre amongst the parents who had no previous knowledge of it. There is a need to initiate collaboration between the Centre and the local settings such as schools, general practitioners (GPs) and children's centres in order to promote the centre.

There were a number of limitations encountered during the study. Feedback from the ethics committee suggested that 'any identifiable information (e.g. post code) should not be considered in the survey to protect anonymity'. Indeed the previous study in West Norwood found that taking the post code information from participants did not benefit the overall study [19]. It should be born in mind however that it is recognised that socio-economic disparities are evident in oral health and related issues and any bias in this area would not be detectable. The study design initially

included a qualitative approach using interviews/focus groups that would have been ideal to explore the views and expectations of families with young children but the schools found it difficult to implement them (Ritchie, Lewis, Nicholls, Ormston, 2013). The cross sectional self-administered questionnaire approach featured a response rate of 24%, which varied between schools. The fairly low response rate may introduce 'non-responder' bias and could be a result of the lack of knowledge of the proposed service (Berg 2005). Despite attempts to engage with the schools and children's centres and increase response rates by displaying posters and putting up a note in the school newsletter as well as a pen as incentive (Dillman et al. 2008; Edwards, et al. 2002), the engagement of parents and guardians through the schools was questionable.

Response bias was minimised by formatting the questionnaires as suggested by William (2003) that included non-leading, non-ambiguous simple and short questions, the page-layout and clarity of the questionnaire. It has been suggested that respondents often answer according to the social norms prevailing rather than the factual situation and hence social desirability might be a factor that may bias the results of questionnaire surveys (Sjöström & Holst 2002). Also, the study had a majority of females and it has been observed in national data that women are more likely to report accessing dental care than men (Office for National Statistics 2011). However, the semi-structured questionnaire design had many advantages and produced 246 responses that gave an opportunity to explore various areas. It also provided the parents, an opportunity to provide anonymously suggestions for future dental service provision.

This research was one of its kind in informing future actions to ensure that West Norwood Health and Leisure Centre's Dental Service, serves the local population and maximises the acceptability and utilisation of the service by catering services with service user involvement. The 'White Paper (2010)' in their slogan (No decision about me, without me) mentions that the consumers of services should be the heart of everything and in charge of decision-making about their care. Perhaps, if the suggestions were implemented, measuring the outcomes could add to the predictability of such a contemporary approach.

Conclusion

The study suggests that the awareness of parents/guardians using the West Norwood Dental Services would increase if the Centre promotes itself and collaborates with schools and children's centres and GPs. The results of the study show that uptake of dental service would depend upon factors such as opening hours, ease of getting appointments especially after school and weekends, having a friendly dental team in a child friendly dental setting. This study provided evidence that parents of young children whose patterns of dental attendance are less than ideal may be more interested in attending the centre.

The results of the study will inform dental service provision at the West Norwood Health and Leisure Centre, although implementing the findings may be challenging and will require inter-sectorial co-operation.

References

1. Gulliford M, Morgan M (2013) Access to health care: Routledge, London.
2. Harris RV (2013) Operationalisation of the construct of access to dental care: a position paper and proposed conceptual definitions. *Community Dent Health* 30(2): 94-101.
3. Deborah L, Barbara C, Ivor C, Rachael H, John M, Nigel N, et al. (2005) Children's Dental Health in the United Kingdom, 2003 (Office for National Statistics ed.).
4. Harris RV, Haycox A (2001) Public Health: The role of team dentistry in improving access to dental care in the UK. *British dental journal* 190(7): 353-356.
5. Al-Haboubi M, Klass C, Jones K, Bernabé E, Gallagher JE (2013) Inequalities in the use of dental services among adults in inner South East London. *Eur J Oral Sci* 121(3pt1): 176-181.
6. Gallagher J, Cooper D, Wright D (2009) Deprivation and access to dental care in a socially diverse metropolitan area. *Community Dent Health* 26(2): 92-98.
7. Marceles W, Muirhead V, Murray S, Redshaw P, Bennett U, et al. (2013) Ethnic disparities in the oral health of three-to four-year-old children in East London. *Br Dent J* 215(2): E4.
8. Pau A, Gallagher J (2009) Oral Health Needs Assessment and Strategy- NHS Lambeth. DP Health, London.
9. ICM (2010) Presentation for PCTs in London: Lambeth, London.
10. Public Health England (2014) London Oral Health Profile, Lambeth, London.
11. Public Health England (2012) Oral Health Survey of 5 year old children 2012. A report on prevalence and severity of dental decay.
12. Penchansky R, Thomas JW (1981) The concept of access: definition and relationship to consumer satisfaction. *Med Care* 19(2): 127-140.
13. ICM (2009) Demand for dental services in London Survey- Lambeth Summary Report. NHS, London.
14. Maxwell RJ (1992) Dimensions of quality revisited: from thought to action. *Qual Health Care* 1(3): 171-177.
15. Freeman R (1999) The psychology of dental patient care: Barriers to accessing dental care: patient factor. *Br Dent J* 187(3): 141-144.
16. Gibson BJ, Drennan J, Hanna S, Freeman R (2000) An Exploratory Qualitative Study Examining the Social and Psychological Processes Involved in Regular Dental Attendance. *J Public Health Dent* 60(1): 5-11.
17. Mc Grath C, Bedi R (2001) Public dental health: Can dental attendance improve quality of life? *Br Dent J* 190(5): 262-265.
18. Gallagher J, Barc C, Wright D (2005) Perceived Oral Health and Dental Attendance of Inner London Residents.
19. Chideka K (2013) The views and expectations of older adults in Norwood about the dental service at Norwood Hall Dental Public Health, USA.
20. Moore M (2013) Views and expectations of Norwood residents towards the new Norwood Hall dental service Dental Public Health, USA.

**Your next submission with JuniperPublishers
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

**Track the below URL for one-step submission
<http://juniperpublishers.com/online-submission.php>**