Executive Summary

- This Health Needs Assessment combines an epidemiological and corporate approach, including both an analysis of available data and evidence review and the results of surveys designed to capture the views of both the Nepalese community and health, dental and other professionals.

- A review of scientific literature suggests that the Nepalese community are at risk of poorer health outcomes due to coronary heart disease, kidney disease and stroke, as well as mental health conditions due to psychosocial stressors associated with moving to the UK.

- The community may also face difficulties accessing appropriate care due to cultural differences, lack of awareness of services and language barrier.

- The results of the community survey suggest relatively good levels of physical health amongst respondents.

- However there are specific concerns, informed by both the community and professional surveys, around the recognition and prioritisation of mental and dental health, as well as appropriate access to smoking cessation and drug and alcohol treatment services.

- Ethnicity is poorly recorded in routinely collected data related to healthcare activity, making detailed analysis of service usage challenging.

Recommendations

1. Efforts are made to raise awareness of available health services amongst the Nepali community, perhaps via health event or workshop, with a particular focus on the following:
   i. Mental health services
   ii. Dental health services
   iii. Smoking cessation services
   iv. Drug and alcohol services
   v. Female health

2. Translated advice on available NHS services and how to access them is provided to new recruits and their families on arrival in the UK.

3. Healthcare providers improve their recording of ethnicity, enabling more comprehensive data analysis and a deeper understanding of the health needs of the community in future.

4. Existing links between Ministry of Defence and NHS service provision are maintained and strengthened.
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Introduction and Rationale

This health needs assessment will aim to provide a clear insight into the health needs of the Gurkha and Nepalese population in North Yorkshire. This will therefore include not just serving Gurkha soldiers, but their families, veterans, students and any other Nepali resident with a non-military background. It will do so by taking an epidemiological and corporate approach. The epidemiological approach includes an examination of available quantitative data, including demographic information and details of currently available services. The corporate approach involves a structured collection of knowledge and views of stakeholders. It is based on the demands, wishes and perspectives of interested parties, both professional and public, and therefore recognises the importance of gaining insight from those who have accessed and delivered local services.

There were multiple factors which led to the project’s initiation. Firstly, recognition that there was a sizeable Nepalese community living in the County about whose health needs little was understood. Given the differences in culture and health service provision between Nepal and the UK, it might reasonably be assumed that those needs differ significantly from the rest of the resident population.

Secondly, over the past few years GP practices within Richmondshire district have noticed a significant cohort of Nepali patients who have had issues with accessing services due to language difficulties. This has had to be addressed with changes to printed materials and staffing.
Thirdly, the uncertainty about armed forces deployments means that there may be increases in the number of Gurkhas and their families residing in the County in future.

Finally, the concentrated placement of Garrison buildings around Catterick means that the serving Nepali soldiers and their families are likely to live within a small pocket of North Yorkshire, which has the potential to create pressure on local services if not addressed by appropriate allocation of resources.
Background and Context

The British Army has contained Nepali soldiers since 1815\(^1\). These soldiers are collectively referred to as the 'Brigade of Gurkhas', taking their name from Gorkha, a historic district of Nepal\(^2\). During their service, the Gurkhas have mainly been based outside the UK, firstly in India, and then later Burma and Hong Kong\(^3\). Following the transfer of Hong Kong’s sovereignty to China, the Brigade headquarters and all Gurkha training was moved to the UK\(^4\).

Until 2004, Gurkhas had no right to remain permanently in Britain, but under Tony Blair’s government, Nepali soldiers who had retired after 1997 (the transfer of Hong Kong sovereignty) and had served for 4 or more years were allowed to settle in the UK\(^5\). As a result of the campaign to secure substantive settlement rights for all Gurkha veterans, in 2009 the Government announced that all those who had served in the army for 4 years or more, regardless of when they retired, were entitled to British citizenship\(^6\).

This, along with a rise in the number of Nepali students studying in Britain, has resulted in a significant increase in migration into the UK from Nepal\(^7\). The 2001 census recorded 5,938

\(^{3}\) British Army (2017) ibid
\(^{5}\) BBC News (2010) ibid
\(^{6}\) BBC News (2010) ibid
\(^{7}\) Adhikari (2013) Nepalis in the United Kingdom: An Overview, Centre for Nepal Studies UK
Nepali in the UK\textsuperscript{8}. This was likely to have been an underestimate due to the lack of a specific Nepali ethnic status available on census forms\textsuperscript{9}. Nevertheless, data from 2011 suggests that around 60,000 Nepali were residing in England and Wales, which represents a considerable rise in population numbers\textsuperscript{10}. However, there is some evidence to suggest that the recent rise in net migration has decreased slightly in the last few years due to a reduction in Nepali student numbers\textsuperscript{11}.

The Gurkha Company, part of the 2nd Infantry Training Battalion and based at the Infantry Training Centre in Catterick, is one of 7 major units of the Gurkha brigade\textsuperscript{12}. It is responsible for the training of new Nepali recruits arriving in the UK\textsuperscript{13}. The exact number of soldiers based at the Centre varies depending on service requirements and annual fluctuations, but a yearly intake typically consists of 200 to 300 soldiers\textsuperscript{14}.

It should be noted that whilst Gurkha soldiers, serving or retired, are likely to represent a considerable number of the Nepali population living in the County, they are not the only potential source of migration. A community study examining migration to the UK from

\begin{thebibliography}{9}
\bibitem{ibid} ibid
\bibitem{Adhikari} Adhikari (2013) Nepalis in the United Kingdom: An Overview, Centre for Nepal Studies UK
\bibitem{Adhikari2} Adhikari (2013) Nepalis in the United Kingdom: An Overview, Centre for Nepal Studies UK
\bibitem{ibid2} ibid
\end{thebibliography}
Nepal found a number of common non-military reasons for UK entry, including professional work, education and study, and asylum\textsuperscript{15}.

Aims and Objectives

The aims and objectives of the Health Needs Assessment are as follows:

**Aims**

- To provide an insight into the health needs of the Gurkha and Nepali population living in North Yorkshire
- Identify recommendations for health service planning and resource allocation to improve the health and wellbeing of the Gurkha and Nepali population living in North Yorkshire

**Objectives**

- Build awareness of the project amongst community and gain support of community leaders
- Present available demographic data to describe the Gurkha and Nepali population living in North Yorkshire
- Outline the current service provision available to the Gurkha and Nepali community
- Summarise health needs of the Gurkha and Nepali population in North Yorkshire
- Highlight any areas of care provision which could be strengthened to meet the health needs of the Gurkha and Nepali population in North Yorkshire
Methods

There are several possible approaches to a health needs assessment. This health needs assessment adopted an epidemiological and corporate approach. The epidemiological approach required an examination of available data to understand the demographics of the population, and present details of current service provision.

The corporate approach involved a structured collection of knowledge and views of relevant stakeholders. This was conducted for both the Nepali population living in the County and health and social care professionals providing services to the community.

The project group consisted of a member of the Public Health team based at North Yorkshire County Council, the Chief Officer of Richmondshire Community and Voluntary Action, and a member of the Dental Public Health team based within Public Health England. Community support was provided by members of the British Gurkha Welfare Society and the Army Welfare Service.

Community Consultation

Structured questionnaires were developed and translated to produce a dual-language survey which could be disseminated amongst the community. This consisted of 60 questions, covering detailed demographic information, perceived health status, diet, tobacco and alcohol use, dental health, mental health, cultural beliefs, health behaviours, and health and dental service usage. The length of the questionnaire was dictated by the poor availability of routinely collected data which was available for analysis, and the
requirement to build as comprehensive a picture of the community’s health needs as possible.

The questionnaires were distributed using a snowball sampling technique, which relied on community and armed forces leaders disseminating the surveys to Nepali residents and soldiers who were willing to participate. The nature of the support organisations and the location of community groups involved meant this activity was largely focussed in the Richmondshire district, and specifically around the Garrison at Catterick. For this technique to be successful, a significant amount of time was spent building relationships with key community leaders.

Questionnaires were returned by Freepost envelope to North Yorkshire County Council and responses were inputted by members of the Business Support team based within the Council. Questions relating to date of birth, surname and postcode were deliberately excluded from the survey to ensure the responses were not identifiable to any particular resident.

**Professional Consultation**

Two questionnaires were developed to capture the views and experiences of health and social care professionals working in the County. Both were in an electronic format, and created using Snap Survey software. One was sent to registered dentists working within North Yorkshire providing primary NHS general and community dental services. This was achieved with the help of NHS England who distributed it by email and embedded hyperlink. Members of the project group sent the second via email directly to other health and social
care professionals, who were selected based on their proximity to Richmondshire District and Catterick Garrison, and their known frontline contact with the Nepali community. Professional groups included pharmacists, health visitors, midwives, GPs, police, Citizens Advice, Social Care assessors and Living Well service co-ordinators.

The content of both was much shorter than the community survey, which was reflective of efforts to maximise the response rate and also the nature of the information to be captured. In both questionnaires, the questions related to the health status of the community, including the population’s most significant health issues, health behaviours and barriers to access.

The project group attended numerous professional meetings in order raise awareness of the research and secure interest and participation, including the Army Covenant.

**Evidence Review**

In order to produce an evidence-based assessment, and to guide the development of the questionnaires, a full literature search was conducted. This provided a greater insight into the health needs of the Nepali population living in the UK. Given the difficulties in accessing accurate and reliable data for the Nepali community in North Yorkshire, the academic literature and findings of research studies were a particularly important resource.

**Project Overview**

The Health Needs Assessment consisted of the following elements:
1. **Initiation of Project**

An initial meeting between the project team, Director of Public Health for North Yorkshire, Chief Executive of Richmondshire District Council, Medical Director of Hambleton, Richmondshire and Whitby Clinical Commissioning Group, Assistant Director of Adult Social Services for North Yorkshire County Council and Chair of the local British Gurkha Welfare Society met to discuss the health issues facing the community and plans for the Health Needs Assessment. The case definition was also considered and decided upon.

2. **Examining available data**

The availability of data sources was established, and it was realised at an early stage that the Assessment would not benefit from health service activity data due to the poor recording of ethnic status amongst care professionals.

3. **Planning consultation with patients and professionals**

All three questionnaires were developed in response to the findings of existing research findings. This stage also included translation of the community questionnaire. Methods of survey disseminations and return were discussed and developed.

4. **Engagement with community and professionals**

The fact there was very little information which could be derived from existing sources of health data meant that the Assessment relied heavily on the questionnaire results. In order to maximise the response rate, the project group
spent time establishing relationships with members of the community and relevant health and social care professionals.

5. **Data analysis**

Analysis of the questionnaire responses was completed once they became available to the project group. This stage also required the consideration of limitations of the data and the implications of the Assessment’s conclusions and recommendations.

6. **Development of recommendations**

Recommendations for future health service planning and research were produced in response to the results of the Assessment.

**Case definition**

The defined population for this Health Needs Assessment was: residents of the County of North Yorkshire who were born in Nepal or consider themselves to have a Nepali ethnic background.

**Funding**

The time of the project group was provided by their respective employing organisations. Additional funding for this Health Needs Assessment, including the translation of the questionnaire and inputting of questionnaire responses, was provided by the Public Health department of North Yorkshire County Council.

**Ethical Considerations**
The community questionnaire was designed so that all data captured during the Assessment was not identifiable to any particular individual, and all results are therefore presented anonymously.
Results of Evidence Review

There is a limited amount of academic literature dedicated to the health needs of Nepali living in the UK. However, a number of Health Needs Assessments in other areas of the country have been completed, which provide an insight into the experience of communities with a similar genetic and cultural background. Nevertheless, the support and services available differ substantially in different health and local authority regions.

The health and wellbeing of migrants is an important determinant of their ability to successfully establish themselves within their host country. Several factors affect an individual’s health status, including their personal medical history, health behaviour (i.e. their response to ill-health) and the quality and availability of local health services. It is also affected by the country’s immigration and settlement policies, societal attitude and legal protection afforded new migrants\textsuperscript{16}.

It should be noted that the Gurkha / Nepali population are not a homogenous group and individuals will have their own unique personal circumstances and health needs. There are however, several general themes that appear in the literature that should be acknowledged and considered.

\textit{Communicable diseases}

The incidence of infectious or communicable disease is far higher in South Asia, and specifically Nepal, than the UK\(^\text{17}\). This includes both food or waterborne diseases, such as hepatitis A and E, and vector-borne diseases, such as malaria and Japanese encephalitis. The rate of tuberculosis is 156 cases for every 100,000 of the population, which is more than three times the rate Public Health England classifies as high incidence (40 per 100,000)\(^\text{18}\).

However, it is estimated that the prevalence of HIV in Nepal is lower than that of the UK, although the mortality rate for the disease is much higher\(^\text{19}\). This is partly reflective of the different approaches to case management between the two countries, due to the resources available for treatment.

Studies have attempted to quantify prevalence levels of such diseases in migrant populations entering the UK, but this has been challenging due to difficulties with sampling. The conclusions made are therefore not generalisable to Nepali or Gurkha migrants.

**Chronic diseases**

There is a higher mortality rate amongst migrants from South Asia and the Indian subcontinent due to coronary heart disease, renal failure and stroke than the rest of the UK population\(^\text{20}\). This is associated with a high prevalence of hypertension and diabetes in those


groups
declared. This increased risk of death from cardiovascular related diseases was observed despite a lower prevalence of tobacco use and high cholesterol (traditional risk factors for heart disease) amongst Indo-Asian migrants compared to the general UK population.

It is unclear whether the overall rate of long-term illness is likely to be higher in Nepali migrants than the UK population. Whilst the rates of chronic diseases amongst migrants from the Indian subcontinent have been found to be higher than the UK average, the rates amongst Chinese migrants were found to be lower.

Whilst several studies have found increased risks of ill-health, such as obesity and obesity-related diseases, in South Asians compared to white Caucasians living in the UK, this research is not migrant-specific and therefore it is problematic to generalise these findings to Nepali migrants entering the UK.

Mental Health and Emotional Wellbeing

There is very little quantitative data relating to the prevalence of mental health conditions amongst migrants in general, and the Nepali community specifically. Nevertheless, there is likely to be significant stress associated with the change in lifestyle associated with migration to the UK, involving a potential loss of community, close support network, and

22 Ibid
traditional events and customs\textsuperscript{24}. Evidence does suggest that those born outside of the UK have poorer mental health outcomes than the UK-born population, but this is likely to be highly dependent on the circumstances surrounding migration, including the country of origin\textsuperscript{25}.

Mental health has a lower priority than physical health in many low and middle-income countries\textsuperscript{26}. It has been estimated that 4 out of 5 individuals with severe mental conditions living in those countries do not have access to supportive care\textsuperscript{27}. Currently, mental health services in Nepal are limited, with only big cities benefitting from specialist psychiatric expertise\textsuperscript{28}. This has the potential to translate to health behaviour which does not recognise the need for mental health assessment, nor seek treatment in circumstances of clinical need\textsuperscript{29}.

**Dental Health**

Epidemiological research suggests Nepal is one of 15% of countries where the prevalence of periodontal conditions and dental caries are among the worst in the world\textsuperscript{30}.

\textsuperscript{25} ibid
\textsuperscript{27} ibid
\textsuperscript{28} ibid
Several studies of Nepalese communities living in the UK have found a low rate of dental registration, raising concerns about the population’s oral health status. Two separate studies found less than 40% of the Nepali population were registered with a dentist\textsuperscript{31} \textsuperscript{32} \textsuperscript{33}. This proportion of the population accessing dental care is lower the average for the general UK population, which is approximately 46\%\textsuperscript{34}, as well as other minority groups living in Britain\textsuperscript{35}. The proportion of Yorkshire and Humber residents accessing care is estimated to be between 52\% and 55\%, based on an assessment in 2015 of the numbers attending a dentist during a 24 month period between 2011 and 2014\textsuperscript{36}.

This may be due to several factors, including not prioritising dental care due to the relatively limited provision available in Nepal, a lack of understanding about the difference between public and private dental provision and the expense of treatment\textsuperscript{37}.

\textit{Access to Services}

As outlined above, evidence suggests that migrants, and specifically Nepali migrants, are at an increased risk of certain health conditions. It is therefore vital that health services are able to address these needs, and seek to reduce inequalities in health outcomes.

\textsuperscript{31} It should be noted that dental registration ceased to exist following changes to the NHS dental contract in 2006. Whilst dentists continue to maintain a list of patients seen under their care, together with dental records for their patients, and can accept new patients for courses of treatment where appropriate, NHS dental registration does not exist in relation to the current GDS NHS contract.
\textsuperscript{34} NHS Digital (2017) Dental Statistics for England - 2014/15 Available at http://content.digital.nhs.uk/catalogue/PUB18129. Date accessed 5\textsuperscript{th} May 2017
\textsuperscript{37} \textit{Ibid}
However, there are a number of reasons access to services may be limited in migrant communities\textsuperscript{38}. A key potential barrier for the Nepali population is language\textsuperscript{39}. A lack of English proficiency may translate to a lack of understanding about what health services are provided and where. It can also act as an impediment to communication with clinicians and other professionals, which can affect the quality of care provided\textsuperscript{40}. It may lead to disengagement with services and delays in appropriate referral to secondary care\textsuperscript{41}.

These barriers have been identified in previous research on the experience and needs of Nepali communities living in the UK\textsuperscript{42}. Common issues relate to difficulties with translation and communication, differences in health beliefs and consulting behaviour and lack of understanding and awareness of available services\textsuperscript{43}.

\textsuperscript{40} O’Donnell, C. A., Higgins, M., Chauhan, R., & Mullen, K. (2007). “They think we’re OK and we know we’re not”. A qualitative study of asylum seekers’ access, knowledge and views to health care in the UK. \textit{BMC Health Services Research, 7(1)}, 75.
\textsuperscript{41} ibid
\textsuperscript{43} ibid
Epidemiological Data

Nepal

Nepal is a country in Southern Asia, situated between India and China\textsuperscript{44}. It has an estimated population of just over 29 million, with over 120 different caste groups and 123 different languages spoken\textsuperscript{45}. 80% of Nepali are Hindu, with smaller numbers following Buddhist, Muslim and Christian faiths\textsuperscript{46}. Life expectancy for both males and females is just over 70 years of age, which ranks as the 155\textsuperscript{th} highest worldwide, similar to the rates for Kyrgyzstan, Bhutan and North Korea\textsuperscript{47}. Only 5.8% of Gross Domestic Product (GDP) is spent on healthcare provision, compared to 9.4% in the United Kingdom (UK)\textsuperscript{48}.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{population_pyramid.png}
\caption{Population Pyramid for Nepal, 2016\textsuperscript{42}}
\end{figure}

\textsuperscript{44} CIA Factbook (2016) Factbook on Nepal. Available at \url{https://www.cia.gov/library/publications/the-world-factbook/geos/np.html}. Date accessed 15\textsuperscript{th} February 2017
\textsuperscript{45} ibid
\textsuperscript{46} ibid
\textsuperscript{47} ibid
\textsuperscript{48} ibid
The World Bank classifies Nepal as a Low Income country due to a GDP of around $1000 per capita\(^{49}\). Its population demographics are typical of a country with a low GDP; as of 2016, over 70% of Nepali are aged under 40, and only 5% are 65 years of age or above\(^{50}\).

**North Yorkshire**

Covering over 3,000 square miles, North Yorkshire is one of the largest and most rural counties in England, and is made up of seven district council areas and six either whole or part CCG areas\(^{51}\). The population have better outcomes related to health, employment, education and housing compared to the typical English local authority area, although there are areas of deprivation, some of which are ranked within 10% of the most deprived areas in the country\(^{52}\).

The life expectancy at birth of those living in the County is 83.7 years for females and 80.1 years for males, compared with a national average of 83.01 and 79.21 respectively\(^{53}\). The population of North Yorkshire is ageing, and the imbalance between young and old is more profound than for England as a whole; over the next 20 years, the number of residents aged 65 and over is likely to rise, and in the case of those aged 85 and over, rise sharply\(^{54}\). A particular challenge is a clear underrepresentation of child-bearing females residing within the County\(^{55}\).

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\(^{52}\) ibid

\(^{53}\) ibid

\(^{54}\) ibid

\(^{55}\) ibid
Figure 2 shows the predicted change in age distribution in the County, with particularly high increases seen in the number of people living to 70 and beyond. Those aged 65 and over will grow in number by an estimated 65,000.

The County is relatively homogenous in terms of ethnicity; the population is 92% white, with only 2% of residents from an Asian or British Asian ethnic background\(^{56}\).

**Nepali in North Yorkshire**

In 2011, data from the Census showed that only 0.5% of the population in North Yorkshire had a South Asian ethnic background. This ethnic grouping will include more than just Nepali residents.

North Yorkshire had 971 residents who identified as having a Nepalese ethnic background, the overwhelming majority (88%) of which were situated in the district of Richmondshire.

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This was the first time country-specific census data was available to study; prior census questionnaires had merely listed ethnic groups (e.g. South Asian), and therefore analysing trend data is not possible. However, anecdotal reports from community leaders suggest that migration into North Yorkshire followed a similar pattern to elsewhere in the country; after the rights to settlement were granted, migration from Nepal increased.

Looking at the Richmondshire data in more detail, it is possible to assess the age and gender split amongst the community (see Figure 3).

Table 1 – Number (and %) of Nepali Residents by District, Census 2011

<table>
<thead>
<tr>
<th>District</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craven</td>
<td>8</td>
<td>0.8%</td>
</tr>
<tr>
<td>Hambleton</td>
<td>13</td>
<td>1.2%</td>
</tr>
<tr>
<td>Harrogate</td>
<td>71</td>
<td>6.8%</td>
</tr>
<tr>
<td>Richmondshire</td>
<td>929</td>
<td>88.7%</td>
</tr>
<tr>
<td>Ryedale</td>
<td>16</td>
<td>1.5%</td>
</tr>
<tr>
<td>Scarborough</td>
<td>3</td>
<td>0.3%</td>
</tr>
<tr>
<td>Selby</td>
<td>7</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>North Yorkshire</strong></td>
<td><strong>1,047</strong></td>
<td></td>
</tr>
</tbody>
</table>
It is clear that there the age structure of the Nepali community does not reflect that of the
general North Yorkshire population seen in Figure 2. There are far more Nepali residents
under the age of 40 than over, and the opposite is true for the rest of the County. In 2011,
78% of the Nepalese community was under the age of 40.
Results of Community Survey

There were 70 responses to the community survey. Not all questions were answered by every respondent however, and so the total number of responses presented under each section will vary. It is important to understand the demographics of those responding in order to appreciate how the results gained may have been affected by the respondents’ age and gender distribution. It also allows comparison with the census data to examine whether the survey sample reflects that of the wider community.

Age and Gender

The ages of the respondents ranged from 16 to 77. The median age was 42, the mean was 42 and the mode was 31.

The asymmetry Figure 4 demonstrates the variation in the age and gender of survey respondents. In particular, young males were very well represented. However, as can be seen in Figure 3, this is not necessarily unrepresentative of the Nepali community living in...
Richmondshire district. However, it is noticeable that there are fewer females represented than we would perhaps expect given the census data. Whilst older residents (aged 56 and over) are represented in proportions similar to those suggested by the census data, it should be noted that these age bands cover only a small number of respondents.

**Level of education**

![Bar chart showing level of educational attainment by age group.](image)

**FIGURE 5 - LEVEL OF EDUCATIONAL ATTAINMENT OF SURVEY RESPONDENTS BY AGE**

Figure 5 shows the level of educational attainment of survey respondents by age group. It suggests younger respondents have a higher level of educational attainment that those who are older. For the 26-35 age band, only a small number had not achieved either secondary school or University education. This stands in contrast to the 66-75 age group, for whom the majority only received primary education.
Figure 6 shows educational attainment by gender. It suggests that the proportion receiving secondary and University education is higher among males than females. However this is partly due to the more even age distribution of female respondents compared to males.

**Years of residence**

Figure 7 shows that the majority of survey respondents have been living in the UK for more than 5 years, with a large number having been settled here for more than 10 years.
Employment Status

The majority of respondents were in either full time or part-time employment. There were no male respondents who were unemployed and looking for work, and only a small number of females (4% of females, 2/44) were.

English language ability

How well do you speak English?
Figure 9 shows the number and types of responses to the question ‘How well do you speak English?’ broken down by gender. The results suggest that English fluency is highest among males, with the majority rating their ability as ‘quite’ or ‘very’ good. Conversely, the majority of females reported that they spoke English ‘not well’ or not at all. This may reflect a true difference in the language and communication skills between males and females in the community, but may also reflect a difference in the ways males and females self-rate their own ability.

**Self-reported Physical Health Status**

![Graph showing self-reported health status by gender](image)

Figure 10 shows self-reported health status by gender. There is no major difference in proportion of the different health states between males or females. Overall, there were very few respondents who rated their health as poor or very poor.
However, Figure 11 shows how self-reported health status is affected by age. Younger respondents were more likely to rate their health as very good or good if they were under the age of 45, compared to those aged over 45. The reverse was true of those reporting very poor or poor health status.

Figure 12 shows there were also very few respondents who reported having a chronic illness or disability. This supports the notion that a significant majority of respondents enjoy a good level of physical health.
**Lifestyle**

In addition to asking directly about health status, the survey also included questions about lifestyle factors that can contribute to health and ill-health, both physical and mental.

**Diet**

Respondents were asked to rate the healthiness of their normal diet, as well as specify the number of portions of fruit and vegetables they consume daily.

![Figure 13 – Self-reported quality of diet by number of portions of fruit and vegetables eaten daily](image)

Figure 13 demonstrates that whilst no respondent considered their diet to be unhealthy, relatively few consumed the recommended number of fruit and vegetables per day. Whilst this is only one aspect of an individual’s diet, it is an important component of what constitutes a healthy diet and can reduce the risk of hypertension, heart disease, stroke, and certain types of cancer.
The Adult Dental Health survey of 2009 classifies those individuals that consume cakes (cakes, biscuits, puddings or pastries), sweets (sweets and chocolate) and sugary drinks (fizzy drinks, fruit juice, or soft drinks like squash) six or more times a week as high sugar consumers. Using this proxy measure for sugar consumption, 50% of those that were dentate in the Adult Dental Health survey 2009 were classified as high consumers of sugar.

Whilst direct comparisons cannot be made with this survey as the questions varied, 30% of respondents declared eating honey, syrup, sweets or chocolate more than once a day. This would be classified as high sugar consumption using the Adult Dental Health survey definition. In addition, 69% of respondents reported drinking squash, fizzy drinks or having sugar in hot drinks. Even though it is not possible to quantify total sugar consumption, this is significant.

Smoking

A slightly higher proportion of respondents (22%) reported use of tobacco products compared to the UK population average (19%) and North Yorkshire average (16.7%), although this was lower than the prevalence in Nepal (27%)\(^57\)\(^58\).

However, of those that used tobacco, the number of respondents choosing smokeless or chewing tobacco was higher than the average for both the UK and Nepal.


The Health Survey of England (2004) reported that the most frequent users of smokeless tobacco products in England were migrants originally from the Indian sub-continent.

This is potentially significant as tobacco use in any form is associated with an increased risk of oral cancer and smoking increases the risk of periodontal disease.
Of the respondents reporting tobacco use, 73% acknowledged that smoking was harmful for their health, although only 60% had received smoking cessation advice from a health professional.

**Alcohol**

In a similar way to the questions on tobacco, respondents were asked about their level of alcohol consumption, as well as whether they considered it harmful to their health.

![Figure 16 - Level of Consumption and Opinion on its Harm to Health by Number of Respondents](image)

Figure 16 shows the distribution of respondents’ consumption and those considering it to be harmful to their health. It is interesting to note that despite low numbers reporting daily alcohol drinking, none considered this harmful to their health.
In North Yorkshire, 24.1% of the population are classified as having ‘increasing and higher risk drinking’ with the England average being 22.3%. A limitation of the questionnaire used for this HNA is that it did not ask respondents to specify the actual amount of alcohol consumed. However, this must be placed within the context of potential cultural and language barriers which may have made it difficult to elicit an accurate response. If ‘2-3 times per week or more’ consumption of alcohol is used as a proxy measure for potentially increased drinking (accepting that some individuals may consume excessive amounts, but only once per week) then 21/70 (30%) of the respondents are at risk, which is higher than the North Yorkshire or England rates. However, if ‘most days’ is used as a proxy measure then only 5/70 (7.1%) would be at risk of excessive levels of drinking. As 21 individuals provided no response, it is difficult to accurately quantify the numbers of those at risk overall.

Figure 17 also suggests that these results may have been influenced by a lack of understanding about the maximum recommended weekly intake of alcohol. No respondent stated that this level was more than the Department of Health recommended limit of 14 units, with the vast majority believing the true safe limit to be significantly lower than this.

Figure 18 shows the level of consumption by gender. The results may have been affected by the low proportion of female respondents who chose to answer this question. Nevertheless, despite very small numbers reporting a daily alcohol intake, both males and females were represented.
A similar proportion of respondents (71%) reported having been provided guidance about their level of alcohol consumption to those being given smoking cessation advice (73%).

**Dental health**

![Diagram](image)

**FIGURE 19 – NUMBER OF NATURAL TEETH BY NUMBER OF RESPONDENTS**

Figure 19 shows the majority of respondents have more than 20 natural teeth, although it is unclear how many have full or partial dentures.

Direct comparisons with the Adult Dental Health survey\(^6\) should be made with caution due to difference in survey methodology; however it provides a useful context for the findings of this assessment. It reported that of those aged 16-24 years old had an average of 28.6 teeth, 55-64 year olds 23.2 teeth and those aged 85 years and older 14 teeth. Despite the low

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\(^6\) Health and Social Care Information Centre (2011) Adult Dental Health Survey 2009
numbers of respondents, Figure 20 provides some indication of the estimated numbers of teeth reported by individuals of different age groups within the Nepalese community in North Yorkshire. It should be noted that 7 individuals were uncertain of how many natural teeth they had and they have been excluded from the figure below.

Despite these results, however, a significant number of respondents reported experiencing toothache or mouth pain, as well as feeling their teeth were ‘worn’.
As highlighted by the Adult Dental Health Survey 2009\textsuperscript{61}, responses to questionnaires regarding frequency of brushing, and frequency of use of a variety of different tooth cleaning products, provide a picture of the motivation of those individuals to engage in oral hygiene practices. The responses do not, however, inform us of the effectiveness or otherwise of the oral hygiene techniques undertaken by the individuals.

64\% of respondents reported brushing their teeth twice or more per day and 36\% reported brushing once a day, which is lower than the rate for the general population. The Adult Dental Health survey 2009 found 75\% of those surveyed in England, Wales and Northern Ireland reported brushing their teeth twice or more per day and only 23\% once per day.

\textsuperscript{61} Health and Social Care Information Centre (2011) Adult Dental Health Survey 2009
All of the respondents in this survey reported using a toothbrush and toothpaste to clean their teeth.

**Use of dental services**

A number of questions were included in order to gain an understanding of respondents’ use of dental services and identify any barriers to access which might exist. These were incorporated as a result of the findings of the evidence review.

60% of respondents visit the dentist at least once per year, (in comparison with 77.4% of respondents from the North Yorkshire and York PCT area in 2008\(^{62}\)) with 40% attending less frequently or only in acute need. This has the potential to reduce the ability to provide treatment, preventive measures and regular hygiene advice.

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62 Health and Social Care Information Centre (2011) Adult Dental Health Survey 2009
Figure 23 shows the reasons respondents reported not having attended a dentist in the previous 2 years. 64% failed to ‘see the point’ in attending the dentist, suggesting there is a lack of awareness amongst some of the respondents about the importance of receiving regular dental examinations and preventive care.

![Diagram showing reasons for not attending dentist](image)

**FIGURE 24 – REPORTED BARRIERS IN ACCESSING DENTAL CARE BY NUMBER OF RESPONDENTS**

14% of respondents reported having difficulty making an NHS dental appointment (in comparison with 20.9% of respondents from North Yorkshire and York PCT in 2008, though this was in relation to access to the provision of routine dental care), whilst a similar proportion (15%) reported having had to delay dental treatment due to the financial cost.
Despite the majority of respondents reporting they felt ‘fairly happy’, ‘happy’ or ‘very happy’, there was still almost a quarter (23%) who were ‘unhappy’ or ‘fairly unhappy’. When respondents were asked to list their main worry, change in lifestyle was the most frequently reported concern.

**Table 2 – Concerns reported by survey respondents**

<table>
<thead>
<tr>
<th>What is your main worry currently?</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in lifestyle</td>
<td>15</td>
</tr>
<tr>
<td>Economic hardship</td>
<td>11</td>
</tr>
<tr>
<td>Lack of social support</td>
<td>9</td>
</tr>
<tr>
<td>Health</td>
<td>7</td>
</tr>
<tr>
<td>Immigration status / visa issues</td>
<td>5</td>
</tr>
<tr>
<td>Lack of traditional food and celebrations</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>58</strong></td>
</tr>
</tbody>
</table>

**Figure 25 – Self-reported mental health status by number of respondents**
A significant proportion (44%) of respondents also reported ‘sometimes’ or ‘often’ feeling lonely. It is possible that this is a result of both the change in lifestyle and lack of social network some in the Nepali community have felt since settling in the UK.

*Use of health services*

The level of GP registration amongst respondents was very high. Males (96%) were slightly more likely to be registered than females (94%), although the difference was very small.
Of those that were registered, 95% were happy with the service provided by their practice.

Respondents were also asked which GP practice they were registered with, although the response to this question was extremely poor; only Harewood Medical Practice and the Defence Medical Services were listed.

Respondents were also asked about the number of GP and A&E attendances in the previous 12 months.

As Figure 26 shows the number of GP attendances is higher amongst those aged over 45 years than under. This is perhaps unsurprising given the increasing health needs of older people, but does contrast with the very low numbers reporting chronic disease or disability. There is no obvious pattern detectable when analysing GP attendance by gender or self-reported health status.
The majority of respondents had not used an A&E department within the previous 12 months. However, 3/32 (9%) of respondents had used it 3 or more times. Some of the reasons given for attendance included ‘regular check-up’ and ‘cold/flu symptoms’. This suggests there may be a lack of understanding about appropriate use of primary and secondary care services.

![Graph showing the number of respondents and the number of A&E attendances](image)

**FIGURE 29 – REPORTED NUMBER OF A&E ATTENDENCES BY NUMBER OF RESPONDENTS**

67% of respondents had received a sight test since arriving in the UK, which given the age distribution of the respondents, is encouraging. All respondents over the age of 55 had received a sight test, which is important given the increasing importance of sight assessment with advancing age. However, it is concerning that of all female respondents, 44% had not received a sight test. Sight loss is an important potentially preventable cause of restriction and isolation; it has been estimated that 50% of sight loss if preventable with
correction lenses or ophthalmic treatment. In addition, nearly two-thirds of people living with sight loss are women\textsuperscript{63}.

**Health beliefs**

Various questions were included in the survey which aimed to gain an understanding of any difference in health belief between the Nepali community and the general UK population, which may affect the ways in which services are accessed.

91% respondents said they felt comfortable in seeking medical attention if unwell, and 60% thought it was sensible to do exactly as medical professionals advise.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{chart.png}
\caption{Proportion of respondents who reported feeling comfortable seeking medical attention if unwell.}
\end{figure}

The majority (74%) felt that good health was the most important thing in life. Respondents were then asked whether they agreed or disagreed with a number of statements related to health beliefs. The results of these questions are listed in Figure 29.

It is interesting to note that the majority of respondents agreed that both ‘good health is generally a matter of luck’ and that ‘if you think too much about your health, you are more likely to be ill’. This suggests that a significant proportion of respondents may not feel empowered to make choices about their lifestyle or behaviour on the basis of health benefit.
Respondents were also asked to consider their likely actions if unwell. Responses to these questions are presented in Figures 30 and 31.

Respondents reported a preference for UK medical attention and treatment, with only a minority ‘likely’ or ‘very likely’ to call a doctor or physician in Nepal. This also extended to a
preference for the use of Western over-the-counter medicines rather than alternative (e.g. traditional Chinese) medicines. More than 70% of respondents were likely to ask friends and family, in both Nepal and the UK, for medical advice if unwell.

**Social care**

Approximately 10% of the population in England are carers\(^6\). 15% of Nepali respondents reported having some form of caring responsibility due to long-term physical or mental ill health or disability, and 18% due to health problems related to old age. However, only a very small number of respondents had to care for more than 20 hours per week (2/62, 3%).

![Figure 34](https://example.com/figure34.png)

**FIGURE 34 – NUMBER OF RESPONDENTS WITH CARING RESPONSIBILITIES DUE TO CHRONIC ILL-HEALTH OR DISABILITY BY WEEKLY COMMITMENT**

Do you look after or give support to anyone because of problems relating to old age?

- Yes - 50 or more hours a week
- Yes - 20 to 49 hours a week
- Yes - 1 to 19 hours a week
- No

FIGURE 35 - NUMBER OF RESPONDENTS WITH CARING RESPONSIBILITIES DUE TO PROBLEMS OF OLD AGE BY WEEKLY COMMITMENT
Results of Professional Surveys

Health and Other Professional Survey

There were 9 responses to this survey, which was sent to around 30 individuals from the health sector, as well as other professional backgrounds. Responses were received from a police officer, health visitor, pharmacist, drug and alcohol service manager, social care assessors, and a Living Well service coordinator.

The survey asked respondents to rank factors which they felt positively affected the health and wellbeing of the Nepalese community, as well as factors which negatively affected health and wellbeing. If the respondent was from a medical background, they were also asked to rank specific health issues which they felt particularly affected the health of the Nepalese population.

Given the low response rate, it is problematic to draw concrete conclusions from the findings. Nevertheless, the following is a summary of the results.

The top three factors positively affecting the wellbeing of North Yorkshire’s Nepali population were thought to be:

1. Sense of community
2. Availability of friends and family support
3. Religion and cultural beliefs.
The top three factors thought to be negatively affecting the wellbeing of North Yorkshire’s Nepali population were:

1. Social isolation
2. Access to services
3. Living in a remote and rural area (linked to availability of transport)

The three most important health issues affecting the health of the community were thought to be:

1. Depression and mental health issues
2. Heart disease
3. Diabetes

It is interesting to note the apparent discrepancy between sense of community and availability of social network being listed as important factors contributing positively to wellbeing, whilst social isolation was thought to be the most important factor negatively affecting wellbeing.

This may be explained by some in the community’s response to mental health conditions. Respondents, some of whom provided further qualitative detail in their responses, suggested there is a lack of awareness of mental health issues amongst the community. Reference was also made to the ad-hoc nature of family support, which may be dependent on appropriate recognition of certain medical conditions.
The good level of English language ability amongst the community was noted to be one of the reasons many Nepali have settled well in North Yorkshire and been welcomed by the wider community. However, it was also highlighted that not every Nepali resident is able to understand or speak English, and this greatly restricts access to services. This makes certain individuals heavily reliant on the assistance of certain community members, who often act as gatekeepers to wider public services.

It should also be noted that the drug and alcohol service had no history of engagement from anyone from a Nepali ethnic background.

*Dental Professional Survey*

Responses were received from 25 dental practices across the County. However, only 5 practices reported having treated anyone from the Nepali community. 2 of these practices had treated more than 20 Nepalese patients over the previous 2 years. The responses received suggest that the dental practices with the greatest numbers of patients are located in the proximity of the military base in Catterick Garrison.

75% of adult patients were reported to be almost entirely dentate, with 25% being partially dentate. The typical treatment provided varied, but most common was examination and assessment, preventive treatment and basic periodontal care. However 3 of the 5 practices (60%) reported that the average Nepalese patient attended the dentist only when experiencing trouble with their teeth or dentures, rather than on a regular basis.
The type of care provided was a mixture of private and NHS, with 60% of practices reporting some element of private care provision. Only 2 provided NHS care exclusively.

3 of the 5 practices had encountered some difficulties in communication with their Nepalese patients, whilst the others had experienced none.

All practices reported offering oral hygiene advice, including guidance on tobacco use, alcohol use, and diet. This also included the offer of onward referral to smoking cessation or alcohol management programmes if necessary. However, only 50% of practices reported that patients tended to accept such referrals.
Currently available services

The Infantry Training Centre Catterick (ITC) is located in Catterick Garrison. The Gurkha Training Company is part of the 2nd Infantry Training Batallion and is accommodated on the Helles Barracks site. The Army Medical Centre on-site provides a primary healthcare service and regular medicals to the military staff at Catterick, but does not provide a service to non-military staff or families. These residents are served by The Health Centre in Catterick, at which several GPs are based.

Harewood Medical Practice has employed a Nepalese speaker to assist with communication and improve the community’s access to primary care services. It is one of a number of practices in North Yorkshire with a significant number of Nepalese patients registered.

Lifestyle services, including drug and alcohol treatment and smoking cessation, are available County wide via primary care or self-referral.

Sexual health services in North Yorkshire are provided by YorSexual Health, offering STI testing and treatment. There is specific provision as part of this service for the military population on Catterick Garrison and their families.

Mental health treatment and support is available via primary and secondary care services. The Beacon, located close to Catterick Garrison, specifically targets single ex-servicemen and women who are most at risk of homelessness.
Limitations of the Assessment

There were a number of limitations associated with this Assessment.

Firstly, the amount of epidemiological data available for study was extremely limited due to the poor recording of ethnicity. This was true of many potential data sources, particularly those related to primary care and hospital activity, and infectious disease incidence. This means that our current understanding of the health status of the Nepalese community is heavily dependent on the results of the surveys developed as part of this Assessment. These findings cannot therefore be corroborated with reference to nationality-specific prevalence and consultation data. Limited comparisons have been made with the findings of the 2015 Oral Health Needs Assessment of North Yorkshire and the 2009 Adult Health Survey, although as the methodology of the reports vary (type and style of questions asked, for example), these should be treated with caution.

Secondly, the lack of nationality-specific data meant that the distribution of the population across the County was unknown and necessitated a reliance on community leaders for access to members of the Nepali population living in North Yorkshire. This did had several advantages. It allowed the survey to be distributed by those who were familiar with the community and had the trust of its members, which is likely to have led to increased engagement with the project and increased response rates. However, this sampling technique may not have produced a representative survey sample, and led to important groups within the community being missed.
Thirdly, despite the assistance of community members, the response rate to the surveys was fairly low. Based on a comparison with census data, the response rate for the community survey was roughly 10% of the County’s Nepali population. But due to uncertainties about the sampling frame (i.e. the total size of the population who might have received the survey) this is not definitive. This ambiguity makes it difficult to guarantee that our findings are representative of the community as a whole. The response of the health and other professional survey was better (~30%), however there were clear gaps in the responses received. For example, no GP returned the survey. This means the findings are missing potentially valuable information.

Fourthly, no qualitative interviews were undertaken as part of this assessment. This was due to several factors. A lack of clear demographic information and only limited access to the community meant that a fair sample representative of the population could not be guaranteed. It was also difficult to determine professionals’ level of interaction with the community given the uncertainty about the location of the community and the population’s likely dispersal over a wide geographic area. Completing qualitative interviews under these circumstances was beyond the scope of the project given the time and funding available.
Recommendations

1. Efforts are made to raise awareness of available health services amongst the Nepali community, perhaps via health event or workshop, with a particular focus on the following:
   i. Mental health services
   ii. Dental health services
   iii. Smoking cessation services
   iv. Alcohol services
   v. Female health

2. Translated advice on available NHS services and how to access them is provided to new recruits and their families on arrival in the UK

3. Healthcare providers improve their recording of ethnicity, enabling more comprehensive data analysis and a deeper understanding of the health needs of the community in future

4. Existing links between Ministry of Defence and NHS service provision are maintained and strengthened