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### Road Safety and Deaf People: The Role of the Police

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## Road Safety and Deaf People: The Role of the Police

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*The ability to travel safely and independently is very important for participation in many aspects of modern life and the police have an important role in maintaining safety on the roads. Although people with hearing impairments form a significant percentage of the population in the United Kingdom (estimated at 1 in 7 by the Royal National Institute of Deaf People), there has been little research on how the police ensure the road safety of deaf and hearing impaired people. This article discusses an investigation into existing police practice in providing support and training to police officers on interacting with deaf people in situations that could have an effect on road safety. It makes recommendations for improving existing practice.*

**KEYWORDS** deaf people, road safety, role of the police, special needs, travel

The first attempt by the police in the United Kingdom to look specifically at the (communication) needs of deaf people arose from a special project entitled “Police and Deaf People: A Lack of Communication.” It was carried

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out by Detective Constable Angela Verity of the Lancashire Constabulary and published by the U.K. Home Office Police Policy Directorate (Verity, 1997). This project won an award and led to questions in the House of Commons on the requirement for the police to address the communication needs of deaf people. As a result the report was distributed to all U.K. police forces. The report was the first major attempt to address the distinct communication needs of the deaf community in particular, as distinct from those of disabled people in general. It provided a detailed analysis of the current practices for interacting with the deaf community in situations where police officers were required to do this. It highlighted the lack of support for communicating with deaf people and the lack of training for police officers at all levels to support them in their work with the deaf community.

The report made several important observations about the need for the police to communicate effectively with deaf people on matters of personal safety, road traffic issues, and road safety in general. It highlighted the lack of training in this area and the need to record video interviews with deaf people whose first language is British Sign Language (BSL). However, the report had no official status. It was produced as the result of the initiative of an individual police officer and not even one of high rank, rather than being officially commissioned by the Home Office, a particular constabulary or the police force as a whole. Thus its recommendations were solely the views of a particular police officer. This is reflected in the treatment of the report. Although the report was distributed to all U.K. police forces, it was left up to Chief Officers to decide which recommendations, if any, they wished to implement.

This article presents the authors' empirical research on the role of the police with respect to road safety and deaf people. The first section contains background material on current police procedures, policies, and practices in the area of road safety and deaf people. It is divided into two subsections. The first subsection discusses the general advice to police offices on communicating with deaf people about road safety and the legal procedures relating to the treatment of deaf people in the area of road safety, particularly when they are suspected of a criminal offense. The second subsection then considers the role of Police Link Officers for Deaf People (PLOD), examples of good practice and several road safety initiatives that address the needs of deaf people.

### **The Legal Framework and Police Procedures and Practices**

Guidance to the police on road safety and deaf people can be drawn from a number of official sources, but there is not a definitive official document that stipulates the conduct of the police in this area. The pamphlet "Guidance to Police: Communicating with Deaf People" (2008) provides general information on interacting and communicating with deaf and hard of hearing people. It includes consideration of the need for good lighting and ensuring that the deaf person can see the police officer's face clearly. In addition, it

notes the need to speak clearly and at a reasonable volume, rather than very loudly, and to ensure the deaf person is paying attention. However, police officers are also warned against making assumptions about what a deaf person can and cannot hear or whether they can lip-read, including assumptions based on the fact the deaf person is wearing a hearing aid. When writing notes, officers should ensure that they use plain language and avoid jargon and abbreviations. Police officers should try to avoid handcuffing a deaf person whose main language is a sign language, as this severely restricts the hand and arm movements used in signing and therefore prevents or at least severely restricts communication. Interviews with a deaf person will generally require interpretation by a language service professional. This could include a British (or other) Sign Language interpreter, a lip-speaker to support people who lip-read or a guide-communicator. A guide-communicator acts as a sighted guide, as well as providing communication support, for instance through a deaf-blind manual alphabet, for a deaf-blind person. In the case of a deaf person who is comfortable reading English, electronic or manual note takers or speech-to-text interpreters may provide transcription into written English.

The *Police and Criminal Evidence Act of 1984 (s.60 (1)(a) and s.66): Codes of Practice: Revised Edition* (2005) details the required procedures for police officer when communicating with deaf people on road safety matters, and, in particular, when interviewing a deaf suspect. Code A (2005) details what actions need to be taken before a search is carried out involving a deaf person whose main language is a sign language. Point 2.7 states the responsibility of a police officer to take reasonable steps to provide information about the police officer's name, the object of the search, and the grounds for authorizing it when searching a person or the vehicle of a person who does not appear to understand what is being said or may not understand English. In the case of a deaf person or a person who does not understand English, the officer must ensure that appropriate interpretation is provided, whether at the scene, or subsequently at a police station.

On the one hand, there is clearly a need for such a code of practice. On the other, it may clarify the problems faced by the deaf community when communicating with the police (on road safety matters) without actually solving them, or solve them in ways that disadvantage the deaf person. For instance, unless the police officer can sign, the code of practice requires a deaf person who signs to be taken to a police station and wait, possibly for an extended period, until an interpreter can be obtained. This can be a very stressful experience, particularly for someone who is deprived of communication and consequently may have little idea of what is happening and why they have been taken to the police station. There is also an element of unintended discrimination with regards to possibly very extended waiting times and missed appointments and a deaf person being required to visit the police station when a hearing person would not. In practice, what happens and the

extent to which the deaf person is inconvenienced rather than, for instance, making an appointment to visit the police station at a time when an interpreter is available, is likely to depend on the deaf person's ingenuity and ability to find alternative communication strategies.

The Code of Practice for the detention, treatment, and questioning of persons who are deaf, Code C: Code of Practice by Police Officers (2005) stipulates that deaf people who are detained must be dealt with expeditiously, and released as soon as any need for detention has ceased to apply. Furthermore, deaf people are entitled to access the code of practice, and this must be readily available in a form that they can understand. A police officer who detains a deaf person is legally required to call an interpreter as soon as possible if they cannot communicate effectively with the deaf person and ask the interpreter to provide the information contained within the code of practice. If a deaf person has unclear speech or other speech impairments, the validity of evidence from statements provided by them to the police could be challenged. Therefore, any deaf person or person with a speaking impairment is legally entitled to only be interviewed with an interpreter. This entitlement can only be waived in writing. In summary, the code of practice, requires communications with a deaf person to generally be supported by an interpreter. For example, Code C, point 13.10 [5] specifies that when a deaf person is charged with a road safety offense, an interpreter is required to explain the offense to them and any other information provided by the police officer when there are difficulties in effective communication. A key recommendation of the report was that guidance should be given to police forces on the importance of recording video interviews with criminal suspects whose preferred language is BSL. Although this recommendation is not part of the official Police and Criminal Evidence Act, Code E: Code of Practice on Tape Recordings of Interviews with Suspects: 4 (b) (2005), it requires a police officer interviewing a deaf person to make a contemporaneous note of the interview as well as tape recording it. This implies that a video recording is required in the case of a deaf person whose preferred language is BSL. This raises both practical issues and issues related to personal data. In practical terms video recording equipment is required and needs to be set up in an appropriate way so that the signed conversation is comprehensible. This will require the camera operator to have some training on the main linguistic features of sign language so that, for instance, they understand the importance of facial expressions and do not just focus on the signer's hands. Furthermore, the deaf person is entitled to view the full interview record, in the same way that hearing people are entitled to access the record of their interviews. In order for deaf people to be aware of their rights, the code of practice needs to be available as a signed video, or interpreted by a sign language interpreter. With regards to privacy and personal data, a sign language interview means that the police force has videos of the person, probably including close-ups of the person's face. This information is not

recorded for sighted people. It is therefore important that access to this interview is strictly controlled and it is not added to data bases of finger prints and photos and used in searches of suspects.

### Police Initiatives to Support Deaf People

Following a proposal by Glen Barham, a sergeant with the Road Death Investigation Team of the Hampshire Constabulary, the U.K. police force launched the Police Link Officers for Deaf People, PLOD initiative in 1999 (Parker, 2009). The purpose of this and subsequent (U.K.-wide) schemes was to promote equality of access to the police and information relating to police matters. Access was defined to be access to documents, records, interviews, advice, and training provided by the police service as well as communication with the police via interpreters. Therefore, link officers are responsible for initiatives such as the emergency SMS text service, signed video interviewing systems, and emergency facilities for lip-reading. There are currently link schemes in a number of U.K. police constabularies, and they also provide basic training to officers on deaf issues. For example, in March 2009, 12 Hertfordshire link officers for the deaf were chosen to start a Campaign for Advancing Communication with Deaf People (CACDP) BSL police-specific course, run at police headquarters. The course aims to enhance the communication skills of the police with deaf people in the community. Historically, officers have completed CACDP Deaf Awareness and Communication Tactics courses. However, this new initiative will lead to BSL-qualified police officers being available throughout the county. Similar initiatives are currently taking place in East Lancashire, the London Metropolitan area, Liverpool, and Scotland ([http://www.signature.org.uk/news.php?news\\_id=14](http://www.signature.org.uk/news.php?news_id=14)).

There have been a number of recent U.K. initiatives involving the police in improving the road safety of deaf people. The BikeSafe-London initiative is a partnership between the Metropolitan Police Service Traffic Unit, the City of London Police Force, and Transport for London. BikeSafe aims to reduce motorcycle, moped, and scooter fatalities and serious injuries (<http://www.bikesafe.co.uk>). Through a combination of public information, training courses, and group discussion meetings, BikeSafe has attempted to address the specific needs of the deaf community. In particular, BikeSafe works with Deaf Bikers UK (<http://www.deaf-bikers.org.uk>), the leading deaf bikers' group in the United Kingdom. In 2005, BikeSafe and Deaf Bikers UK organized the first road safety initiative for the deaf biker community in London. It provided deaf bikers with the opportunity to attend Rider Skills Days that raise the awareness of the major causes of motorcycle collisions and potential hazards faced by deaf riders. Deaf Bikers UK continues to work with BikeSafe to provide road safety information, not only to deaf bikers in the United Kingdom, but throughout Europe.

A recent ICT (information and communications technology) initiative to support the safety of the deaf community is the Emergency SMS Text Service ([http://www.staffordshire.police.uk/information\\_zone/smsdeaf](http://www.staffordshire.police.uk/information_zone/smsdeaf)). This mobile phone service enables deaf people to contact the fire and police service independently, without the need for an interpreter or help from a hearing person. The service is restricted to emergency situations. It enables a deaf person to send a text message to an emergency text number. Where possible, the message should include details of the emergency. When the message is received by the police force control room, an automated response is generated informing the deaf person that the message has been received. The police officer or fire fighter will then send a personalized message, either asking for more information, or to inform the deaf person that they are on their way. In the case of road safety issues and traffic accidents, the SMS text service has been found to be a valuable technology for improving the communication options for deaf people with the emergency services. There would clearly be benefits in extending the geographical coverage of this scheme as well as more publicity to ensure all potential users are aware of it. There would probably also be benefits in extending the service to more general non-emergency contacts with the police.

Another ICT initiative that has been successful in improving communication between the deaf community and the police on road safety matters is the BSL Video Interpreting Facility. It was developed through cooperation between the Royal National Institute for Deaf People (RNID) and the U.K. police force and first piloted by Northumbria Police (2002). The service aims to address the shortage of sign language interpreters. It uses video phones in selected public sites, including police stations, to allow deaf people to communicate with the police force. The service allows deaf BSL users to contact an interpreter at a remote location and obtain interpretation support. However, consideration has not yet been given to the communication needs of deaf people who use sign languages other than BSL.

## METHODOLOGY

Two questionnaires were drawn up, one for police stations and the other for individual police officers. The questionnaire for police officers was divided into three sections. The first section collected strictly personal information, including age, gender, and whether they or anyone in their family was deaf, as well as job-related information, including police rank, years in the force, area the officer served in, and the proportion of their time spent interacting with members of the public. The second section on working with deaf people had two main components: (1) Training, which investigated initial and subsequent training on disability equality, communicating with deaf people, deaf culture, and working with the deaf community. (2) Communication

issues, which investigated the communication strategies police officers would use with deaf people who speak English and deaf people who sign, their knowledge of sign language, and whether they carried any support materials to facilitate communication. The third section on road safety issues and deaf people differed from the first two sections in that it focused on respondents' opinions and suggestions for improvements rather than factual information. The questions in this section can be divided into the following four categories: (1) Road safety issues, including whether police officers considered that deaf pedestrians or drivers have additional or different road safety issues from hearing ones and whether they considered that difficulties in communication between the police and deaf people could reduce road safety. (2) Communications, including situations in which they considered a sign language interpreter to communicate with deaf pedestrians and/or drivers who sign to be essential and desirable, respectively, as well as how they would obtain an interpreter. This also included the frequency of communication with deaf drivers and/or pedestrians and of communication problems, as well as the strategies used to solve these problems and whether they were successful. (3) Improving road safety for deaf people, including whether respondents considered there was a need for road safety training or materials specifically for deaf people and suggestions for these materials or training, as well as for measures to alert deaf people to road traffic or otherwise improve road safety. (4) A final open question asking for additional comments on respondents' experiences with deaf pedestrians and drivers and further suggestions for improving road safety.

A questionnaire package was sent to 30 police stations in Scotland and 30 in London. The package comprised one copy of the police station questionnaire, five copies of the questionnaires for police officers, a covering letter addressed to the chief inspector of the police station, and six stamped, addressed envelopes. The police stations were chosen from lists of police stations on the Internet to cover a number of different types of areas, including rural areas. However, although a number of smaller police stations were included, the majority of questionnaires were sent to larger rather than smaller stations to increase the chances both of five police officers in the station completing the questionnaire and police officers having significant experience of interaction with deaf people. It should be noted that the survey reported here is only a starting point. Further investigation through a large-scale research project involving a number of different countries would be desirable.

## RESULTS

### Overview of Respondents' Personal Data

Completed questionnaires were obtained from 23 police officers, with 18 of them in Scotland and 5 in London, and 4 police stations, 3 in Scotland, and

1 in London. Due to the very low response rates for police stations, only the data for individual officers were analyzed quantitatively. With regard to any respondent bias, it is likely, although not definite, that the responses will be biased toward stations and police officers with more knowledge, experience, and/or interest in working with and supporting deaf and hearing impaired people. Approximately twice as many male (65.2%) as female (24.8%) police officers responded, which is not surprising as there are more male police officers. Well over half (14 officers = 60.9%) were 26 to 40 years old, just over a quarter (6 officers = 26%) were 41–60 years old, and 3 officers (13%) were 16–25 years old. All the police officers in the youngest age group were female. Only one respondent was himself deaf, whereas just over a quarter (26.1%) had deaf family members. There was a reasonable geographic distribution of respondents in Scotland, including Fife, Grampian, Strathclyde, Glasgow, Aberdeen, Lothian and Borders, and N.E. Scotland. Most respondents were experienced, with a mean service of 10 years and 11 months and a standard deviation of 7 years and 1 month, although two respondents had a year or less of service. One respondent was support personnel rather than a police officer. Nearly two thirds (63.6%) of the remainder were constables and 27% sergeants with one inspector and one chief inspector. The support personnel respondent was a road safety manager. Fifty percent of the remainder did not give or have a specific job title other than sergeant or constable. 22.7% worked in road safety, 18.2% were involved in community policing, 9.1% in safer neighborhoods, 4.5% in safer schools, and 4.5% in driver training. All respondents, other than the driver training sergeant, spent a significant amount of their time with members of the public, with 39.1% spending more than two-thirds of their time, 9.1% two-thirds of their time, 21.7% about half their time, and the remaining 26.1% about a third of their time working with the public.

### Working With Deaf People

39.1% of respondents had had initial training in disability equality or awareness when they joined the police force and 47.8% subsequent training. However, where details were provided, it seems that the training was relatively general and only of short duration (one or two days). In some cases this training was only a small component of more general training on equal opportunity issues or diversity. Only one of the respondents had received initial training on communicating and working with deaf people and deaf culture, as part of a week-long diversity training, and only one respondent subsequent training in all these areas, as well as subsequent, but not initial training in disability equality or awareness as part of a two-day force-wide equality and diversity training involving hearing impaired students. One respondent had received some initial training on communicating with deaf people, but this was only a small component of other training. Another

respondent had received subsequent training in both communicating with deaf people and disability equality/awareness, involving the interpreter service. Overall, the training received by these respondents to prepare them to work with deaf members of the public was minimal. 91.3% of respondents provided suggestions for communicating with deaf people who use spoken language, whereas only 73.9% and 69.6% respectively provided suggestions for communicating with deaf people who sign at the police station and outside it. A number of respondents gave similar or identical suggestions for communicating with deaf people who sign and those who use spoken language. 39.1% of respondents mentioned signing as a strategy for use with deaf people who speak English, either in the context of determining whether the deaf person required or obtaining an interpreter, contacting someone who can sign or using a sign alphabet. In addition, all these respondents mentioned other strategies, in particular writing and speaking slowly and clearly and/or facilitating lip-reading. One respondent mentioned e-mail, but did not explain how this would be used. While texting would be a possible strategy, it is less clear how e-mail would work. The respondents' knowledge of sign language was minimal, with only 13% of respondents having any knowledge, and with one of these respondents sometimes able to understand and answer simple requests for information and the other two knowing a few expressions and/or the British finger-spelling alphabet. All respondents who replied to the question on communication with deaf people who sign suggested a combination of writing and using an interpreter or another person who signs. There was a slight preference for an interpreter/signer in the station context, with 46% of respondents suggesting this solution for a police station, but only 31% outside the police station. 73.9% of respondents never carry support materials, 4.3% always do, 8.9% generally do, and 13% were unsure. However, in the case of the respondents who generally carried support materials, these were a notebook or paper and a pen. An innovative solution was also mentioned by one of the road police constables. This involved the use of the English section of a foreign language phrase book related to traffic. This is a simple and relatively inexpensive solution that could be made more widely available. The phrase book could also be supplemented by pictures and/or stills of deaf people signing the phrases.

### Road Safety Issues and Deaf People

Sixteen respondents considered that deaf pedestrians faced additional or different road safety issues to hearing pedestrians, 2 respondents thought that they did not, and 4 were not sure, with 1 respondent considering that there possibly were additional or different issues. In the case of deaf drivers 14 respondents considered that they had additional or different safety issues and 2 respondents that they did not. Seven respondents were unsure, with one of these respondents providing suggestions for safety issues. Comparing

the frequencies of the 16 respondents who considered that deaf pedestrians faced additional or different road safety issues to hearing pedestrians with the 14 respondents who considered this with regard to deaf drivers did not result in a significant difference,  $\chi^2(1, n=30)=0.04, p=.84$ . Due to one degree of freedom, the  $\chi^2$  test was carried out with the Yates correction for continuity. The main issues raised were the following: (1) an inability to hear traffic (approaching); (2) an inability to hear the sirens of emergency vehicles, car horns, and shouted warnings; (3) an inability to hear audible warnings at road crossings; (4) risks in crossing roads; (5) an inability to hear strange noises that indicate vehicle damage; and (6) an inability to hear radio traffic announcements. The first two issues, which were the most frequently cited, were common to deaf drivers and pedestrians, although shouted warnings was only raised in the context of pedestrians. Issues 3 and 4 were only raised in the context of pedestrians and issues 5 and 6 for drivers. Respondents also suggested that the impact of vehicle noise on deaf and hearing people is likely to be different and that deaf pedestrians and drivers may react less to traffic and be unaware or less aware of danger. Only 8.6% of respondents suggested specific measures for alerting deaf respondents to road traffic, namely the use of convex mirrors at crossings, making a crossing light flash when they change color to draw attention to this, and other visual indicators. However, it should be noted that flashing lights at crossings could cause problems for some other groups of disabled people, including those with epilepsy and autistic spectrum conditions. The other 39.2% who responded to this question suggested more general measures, including additional education on road safety, road traffic awareness courses, and the need to be more observant when crossing the road and to continually scan the environment. While increased awareness is clearly desirable, particularly for deaf people, this is putting the responsibility for road safety onto the individual deaf person rather than society as a whole. Nearly half (47.3%) of the respondents were unsure whether difficulties in communication between the police and deaf people reduced road safety; just over a quarter (26.1%) considered they did not; and only 8.4% considered they did reduce road safety, with 13% not answering the question. The sample is too small to say anything meaningful about the difference in the percentage of respondents who considered that difficulties in communication did and did not reduce road safety. A much larger sample would be required to determine whether the result of application of the chi squared statistic with Yates' correction for continuity, namely,  $\chi^2(1, n=8)=1.12, p=.29$ , is still meaningful or purely an artefact of the sample size. Of the responses to the circumstances in which communication difficulties could reduce road safety, the suggestion that the respondent was unsure whether deaf people understood why the police were speaking to them was directly relevant. Other suggestions included the statement that police were responsible for good practice and the need for education on road safety issues. Eighty-seven percent of respondents provided

suggestions for the types of circumstances in which a sign language interpreter would be essential for safety or to avoid a miscarriage of justice, but only 26.1% provided suggestions of circumstances where this would be desirable. Examples of essential circumstances included: (1) being a witness or suspect or as part of an investigation into a serious crime or offense; (2) in court; (3) during police interviews or any incident that could lead to charges; (4) to ensure the deaf person is fully aware of their rights, understands any caution or to explain the reason for an action that they might not otherwise understand; (5) involvement in a road traffic crash/accident; and (6) when charged with an offense. Examples of situations where an interpreter would be desirable included: (1) talking to deaf school children, (2) providing safety advice, (3) providing directions, (4) minor traffic offenses as the accused. Over a quarter of the respondents (26.1%) were not sure how to obtain an interpreter and 8.7% did not know. Thirteen percent of the remainder mentioned using the interpreter service or language line employed by the police and another 13% contacting an approved interpreter or interpreting service. The remaining nearly half, comprising 47.8% of the total respondents, mentioned using the force contact center or control room to make the arrangement. The percentage of respondents in Scotland who knew how to contact an interpreter (61.1%) was about three times that in London (20%). Although this is obviously a large difference, the number of respondents, particularly in London, was too small to determine whether this is generally the case and further research would be required to determine whether police officers in Scotland are significantly better informed about how to obtain an interpreter than those in London. Although it is possible to calculate an Odds ratio of 6.29 (95% CI=0.58, 68.43), no  $\chi^2$  was performed because the expected cell frequencies in the London group were clearly smaller than 5 (2.39 and 2.61). None of the respondents had frequent contact with deaf people, with 86.9% of respondents having contact with deaf people who sign less than once a year, 4.3% less than once in 24 years, and 8.7% once a year. The data for contact with deaf people who use spoken language are similar, although very slightly greater, with 82.6% having contact less than once a year, 8.7% once a year, 4.3% a few times a year, and 4.3% not answering the question. Seven respondents who experienced communication problems at least occasionally with deaf signers, five respondents who experienced problems with deaf people who speak, and two respondents who had never experienced communication problems with deaf people provided communication strategies. The strategies used with deaf signers and English speakers were very similar and included writing, except in the case of one respondent. In addition, respondents did not seem to make any distinction in the strategies suggested for use with deaf people who sign and those who speak. For instance, one respondent additionally used an interpreter and two ensured

lip-reading or use clear speech with both deaf people who sign and those who speak English.

Fifteen out of the 23 respondents (65.2%) considered that they could benefit from additional training in communicating with deaf people. In particular, although estimates of the percentage of deaf people in the population vary and include 6.6%, 8.6%, 10%, and 14.3% (Holt, Hotto, & Cole, 1994), all these estimates show that deaf people form a numerically significant minority. 8.9% (2 respondents) considered that they did not require additional training and 26.1% (6 respondents) were not sure. The suggestions for additional training can be divided into the following three categories: (1) general awareness and policing for the whole community, (2) basic sign language and input from competent signers, and (3) communication requirements of the deaf community, the deaf point of view, and what deaf people want from the police. Nearly half the respondents (47.8%) considered that there is a need for both road safety materials and training aimed specifically at deaf people, with 4.3% considering that there was a need for materials, but being unsure about training. Thirteen percent of respondents considered that both materials and training were unnecessary and 34.8% were unsure. Taken together, 12 respondents saw a need for materials and 3 respondents no need for materials,  $\chi^2(1, n = 15) = 4.26, p < .05$ , with Yates correction for continuity applied. Suggestions for materials and training included audio material, an awareness-raising day, and literature on pedestrian safety, as well as the need to provide the information missed that it is assumed that deaf drivers and pedestrians know. One respondent noted the importance of guidance from deaf people on developing this material and another the need to increase road safety awareness rather than awareness of deaf people. One respondent stated that he did not recall a notable incident in 17 years of policing. Only 21.7% of respondents provided additional comments about their experiences with deaf people and 13% additional suggestions for improving road safety. Forty percent of those who provided additional comments stated that they had very little experience. Other comments included the facts that writing down everything helps greatly and that most issues occur post incident, for instance after a crash or breakdown. Another respondent noted that his experiences have mainly been positive, but that the inability to communicate clearly has caused frustration.

Suggestions for improving road safety included the need to consult deaf learner drivers to find out about their needs and capabilities and the need to promote road safety and make deaf drivers more aware of their surroundings. The proposal for providing information on driving licenses about the bearer's deafness would require careful consideration, as it has both advantages and drawbacks. While it could enable more effective support to be provided to deaf drivers, it could also lead to stigmatization and deaf drivers may not wish to be identified in this way. Therefore, it should only be implemented if positive feedback is obtained from the deaf community, in consultation

with them and on an opt-in basis. Alternatively, a small card that indicates that the bearer is deaf and their preferred communication strategies may be more appropriate. Another respondent noted that a national response would have more impact, but that this would depend on the percentage of deaf people in the population. Half of the respondents stated that they never had any problems in communicating with deaf people.

## DISCUSSION

Although several respondents had had training on disability equality or awareness, training directly related to working with deaf people was minimal. Most respondents had no knowledge of sign language, with a small number of respondents having very basic knowledge. Most respondents considered that they did not carry support materials, presumably ignoring the potential of a pen and notebook. A large number of respondents considered that both deaf drivers and pedestrians faced additional or different road safety issues, arising from the inability to hear traffic approaching, emergency vehicles, or audible warnings at traffic crossings. The last category is slightly surprising, unless road crossings by railway lines are meant. However, despite the high percentage of respondents with concerns about road safety issues, very few respondents had suggestions for improving road safety by alerting deaf people to road traffic. These suggestions only referred to road crossings and no suggestions were made for making deaf people more aware of approaching traffic or emergency vehicles. Other more general suggestions seemed to put the onus on the deaf person to be more aware rather than looking at ways in which society as a whole can take responsibility for increasing road safety for deaf people in particular. Nearly half the respondents were unsure whether difficulties in communication between deaf people and the police reduced road safety. From a descriptive point of view, there was a higher number of respondents in Scotland who had greater knowledge about how to obtain an interpreter than in London. However, it is not clear whether this difference is purely an artifact of the low response rate or indicates better practice in Scotland in providing information to police officers on communicating with deaf people. Respondents indicated that they would use identical or very similar strategies for communicating with both deaf people who sign and deaf people who speak (English). This indicates a possible lack of knowledge and degree of confusion about the communication strategies used by deaf people. While there are deaf people who are able to both speak and sign relatively fluently, most deaf people are only able to efficiently use one or other communication strategy. For instance Hersh, Obene-Djan, and Naqvi (2010; this issue) found that only 8.3% of deaf respondents whose main or preferred language is a sign language are generally understood by hearing people when they speak English

and only 16.6% of them understand spoken English very easily. Deaf people whose main language is English are even less likely to be fluent signers. However, 39.1% of respondents mentioned signing as a strategy for use with deaf people who speak English, either in the context of determining whether the deaf person requires or obtaining an interpreter, contacting someone who can sign or using a sign alphabet. None of these strategies is likely to be successful with deaf people who use spoken language. Except in one case, the strategies used for communicating with deaf people who use both types of communication strategies involved writing. On the one hand, this is an obvious approach, which only involves materials that most police officers are likely to have with them and one respondent noted under additional comments that writing down everything helps greatly. On the other hand, this suggestion ignores the fact that many deaf people have very low levels of literacy. Many respondents indicated that they would use strategies based on an interpreter and lip-reading with both deaf people who sign and those who speak. This indicates a lack of knowledge about the deaf community and a lack of understanding that, in general, different communication strategies will be required with these two groups of deaf people. There is therefore clearly a need for training, including on deaf culture, to bridge this knowledge gap. Many, although not all, respondents seemed to have been aware of their lack of knowledge, since nearly two thirds of them considered that they could benefit from additional training on communicating with deaf people. Nearly half the respondents considered that there was a need for road safety materials and training aimed specifically at deaf people.

## RECOMMENDATIONS

This section outlines seven key recommendations to address issues related to ensuring the road safety of deaf people can be addressed by the police. (1) Training should be obligatory for all police officers who interact regulatory with members of the public or have a management or supervisory role. It should include the diversity of the deaf community, different strategies for communicating with deaf people, deaf awareness, and culture and specific issues relating to road safety, as well as information on how to get hold of a sign language interpreter or lip speaker. The training should be drawn up and delivered by deaf and hearing impaired people. It should preferably last long enough until the police officer is able to demonstrate his/her competence in interacting with a deaf role model (played by a deaf person). (2) Support materials, a booklet or small book, should be produced, containing words and expressions frequently encountered in road traffic and transport policing. These should be written clearly in medium to large print and accompanied by images of a deaf person signing the words or expressions as well as other graphics. Another useful support material would be a

number of small- to middle-sized cards with important information in text and still images of the signs, such as an interpreter has been called. This material should be produced in consultation with deaf and hard of hearing people, including both signers and people who speak English, as well as people with varying levels of literacy. Similar support materials could be produced for other areas of policing. (3) Police forces should organize and attend sign language courses with vocabulary specific to policing. (4) Increasing the numbers of deaf and hearing impaired police officers at all ranks. This will also impact on the ways in which the police force interacts with the deaf community. It will also give a positive message to the deaf community and probably make it easier for them to approach the police. (5) Provision of communications support: It is vitally important that when engaging with deaf people the police have appropriate communications support. This should include fully trained interpreters and lip-readers, as well as note takers and video recordings. The latter is particularly important when a deaf person is giving signed evidence, to enable them to review this evidence later, analogously to hearing people being able to listen to recordings of interviews with them. However, it is important that access to this video evidence is severely restricted in order not to reduce the deaf person's privacy. Increasing the number of qualified interpreters, note takers and lip-speakers as well as the communication skills of all police officers with deaf people will also reduce the length of time that deaf people have to wait for communication support and the requirement for visits to the police station. Targets should be set for the maximum waiting time for communication support and general practice should become the provision of this support at the scene rather than requiring the deaf person to visit the police station. (6) Deaf road-safety materials: It is important that the police force produce road safety materials specifically for deaf people and that these materials should be accompanied by the offer of training aimed specifically at deaf people. Such training should provide information about pedestrian safety and road safety, including information that is specific to the deaf community, as well as information about communicating with the police and the available communication support. (7) Involvement of and outreach to the deaf community: Only deaf people themselves fully understand their requirements and the road safety issues they face. The police should increase their outreach work to and communication with the deaf community in order to find out about their requirements and better explain the services they can provide and how they can support deaf people. This should include communication with deaf pedestrians and drivers, including learner drivers. In addition, all materials and training aimed at the deaf community should be developed in consultation with deaf people. This consultation and involvement should target a diverse range of different deaf people, with regards to a range of factors, including age, gender, use of sign or English, education, communication skills, and literacy.

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