

Improving understanding of the public awareness of aphasia in different cultures and communities is particularly relevant for efforts to improve and extend services, research support and encourage the social inclusion of aphasic people (Elman et al., 2002). Previous research suggests levels of knowledge of aphasia vary significantly across age, gender, socio-economic group and country (Code et al., 2001; Simmons-Mackie et al., 2002) Elman *et al.* (2000) suggest there is a probable relationship between the services provided for a particular condition, the research funds invested and the level of public awareness of that condition. They found a much lower frequency of occurrence of 'aphasia' in 50 US newspapers compared to other associated conditions, despite the fact that aphasia has an equal prevalence to Parkinson's disease and a higher prevalence than other conditions, except stuttering. Frequency of occurrence of a condition in the media should be directly related to the levels of public knowledge and funding of services for that condition. The targeting of awareness raising in different countries and cultural contexts is therefore dependent upon awareness raising.

There have been a number of surveys of what the general population knows about aphasia. Surveys were carried out with convenience samples of shoppers in England, Louisiana and California, and Australia. Shoppers (N=929) were surveyed using the same questionnaire which asked, not only if respondents had heard of aphasia, but determined how much they knew and where and how they had heard of it.

Phone surveys have been conducted using large samples, but few have gone beyond asking respondents if they have heard of aphasia. *Speakability* (2000) conducted a telephone survey of 1005 respondents balanced for class, age, sex and regions of the United Kingdom, who were asked what they knew of aphasia. Three percent (N=32) responded appropriately. Of this 32, 25 were female and 13 had a relative or friend with aphasia. When provided with a basic definition of aphasia, 21% (N=213) knew or had known someone with aphasia and this figure increased with age. A recent phone survey was carried out with N=2000 in the UK by the *Aphasia Alliance* (2008). Over 90% had never heard of aphasia and 79% could not distinguish aphasia from skin disease, a long period of time, or a fruit. In some regions more respondents thought aphasia was a skin disease or a fruit than a communication problem (www.aphasiaalliance.org)

The aim of this study was to extend understanding of the public awareness of aphasia across three countries: Greece, Argentina and Norway, using a larger sample than previous studies, but using the same methodology so that comparisons can be made with previous data.

Method

Sample.

A convenience sample of shoppers and others in public places were surveyed in Greece (N=800) (pop. 10.722 million), Argentina (N=800; pop. 40.482 million) and Norway (N=251) (pop. 14.787 million) using translations of the questionnaire used by Simmons-Mackie et al, 2002.

Questionnaire.

The questionnaire requested information on age, gender and occupation. We asked respondents if they had heard of aphasia or dysphasia and for those who said they

had, we tested their knowledge by asking them to choose from a list which were/were not features of aphasia. A respondent had some basic knowledge of aphasia if they selected 'speech', 'language' or 'communication problems' together with 'brain damage or injury'. They could also choose problems with 'reading', 'writing' and 'understanding', but choice of one or all of these latter features was insufficient on their own. There were also foil questions on 'impaired intelligence', and 'mental' problems. Respondent were also asked questions about stroke, where they had heard of aphasia and if anything could be done for people with aphasia, but we shall not report those finding here due to lack of space.

Occupation was recoded into a standard classification of socio-economic class (OPCS, 1980) with seven groups: Group I - high professions such as lawyer, physician, dentist, to Group VII - unskilled manual workers. We added a further category, VI, which included unemployed, retired or students.

Results

Table 1 shows the numbers of respondents from each country and Table 2 shows the age profile of the sample. The mean age of the Greek sample was significantly younger than the Argentinean ($t=12.21$; $p<.0001$; 2 tailed) and Norwegian samples ($t=5.24$; $p<.0001$; 2 tailed)

Table 3 shows the distribution of gender between the samples. More females were surveyed in Argentina and Norway, perhaps reflecting the probability that females are more likely to be found in shopping centres than males. However, Greece sampled equal numbers of each gender. The difference between the figures was significant (Chi Sq=9.65; $df=2$; $p=.008$).

If respondents had heard of aphasia, we asked the series of questions above designed to determine if they had basic knowledge of aphasia. Fig 1 shows the percentages of respondents who had heard of aphasia and Fig 2 the percentages of the samples who had some basic knowledge. Between 57.4% (Norway) and 20% (Argentina) had heard of aphasia (37.1% overall), but those who actually had basic knowledge ranged from 13.9% (Norway) to 6.25% (Argentina), with a combined percentage just under 9.2%. These figures contrast with Simmons-Mackie et al who found between 9.25% and 18% of the English-speaking sample had heard of aphasia (13.6% overall), while those with a basic knowledge ranged from 1.54% to 11.53, with a combined percentage of 5.42%.

Table 4 shows the mean ages of those who had heard of aphasia. Simmons-Mackie et al found that age and gender interacted significantly with whether people had heard of aphasia or had basic knowledge. In the current study, of those who had heard of aphasia, Norwegian ($t=6.59$; $df=249$; $p<.0001$) and Greek ($t=5.52$; $df=797$; $p<.0001$) shoppers were significantly younger (Table 4). For those who had some basic knowledge of aphasia, only in the Greek sample were respondents significantly older (mean difference=9.017 years) ($t=4.868$; $df=798$; $p<.0001$) than those who didn't.

Fig. 3 shows the socio-economic spread of the sample. Argentina surveyed a particularly large number of skilled non-manual workers and Norway large numbers of retired, unemployed and students.

Conclusions and Implications

We found significant variability in knowledge of aphasia between the countries surveyed and between them and previous surveys of English-speaking countries. As with earlier previous studies, this appears to provide further evidence of differences in levels of awareness of aphasia in different cultures. Our combined sample is larger than previous surveys, but space limitations allow only basic reporting of data and further examination of the interactions between occupation, where respondents had heard of aphasia and cross-cultural comparisons will be the topic of our presentation if accepted. Variation in awareness may be related too to local media impact, regional variations in incidence/prevalence of aphasia and socio-economic and educational variations. Such information is vital for targeting awareness raising.

References

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Table 1. Raw data for the sample.

	Argentina	Greece	Norway	Totals
Number	800	800	251	1851
Male/Female	340/457	400/400	107/142	847/979

Table 2. Mean Age with standard deviations and ranges for the sample.

	Argentina	Greece	Norway	Combined
Mean	48.2	37.9	43.7	43.16
SD	17.77	16.02	19.25	17.68
Range	15-95	15-86	15-88	15-95

Table 3. The percentage distribution of gender between the samples.

	Argentina	Greece	Norway	Combined
Male	42.5	50	56.5	45.8
Female	57.5	50	42.5	54.2

Table 4. Mean age and whether respondents had heard of aphasia and had some basic knowledge

	Argentina	Greece	Norway	Combined
Heard of	47.8	36.4	50.05	47.9
Knowledge of	43.2	46.06	45.6	44.9

Fig 1. Percentages of respondents in each country who had and had not heard of aphasia.

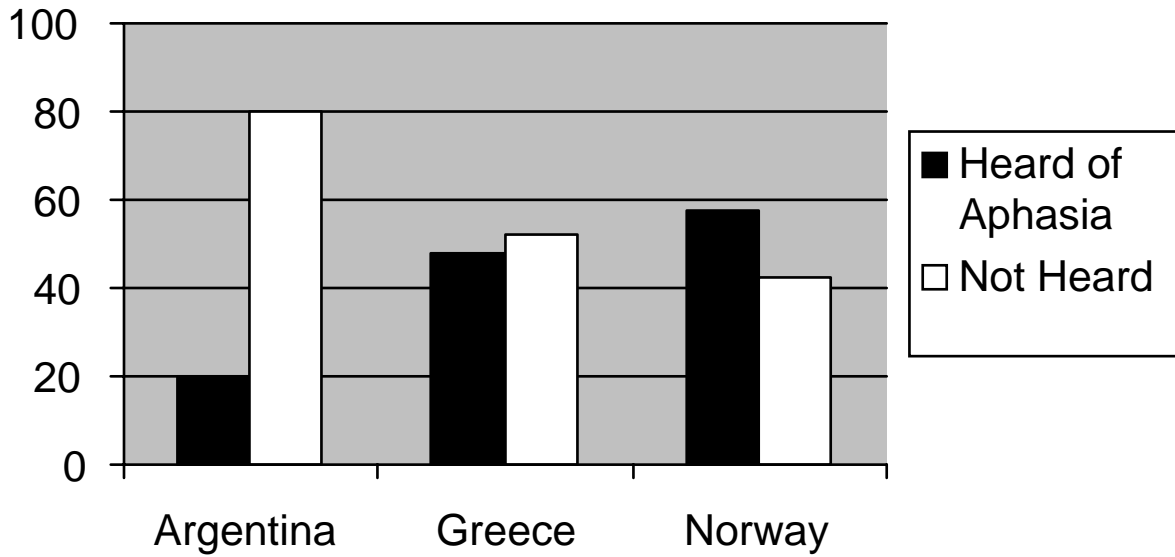


Fig 2: Percentages of respondents with and without some basic knowledge of aphasia.

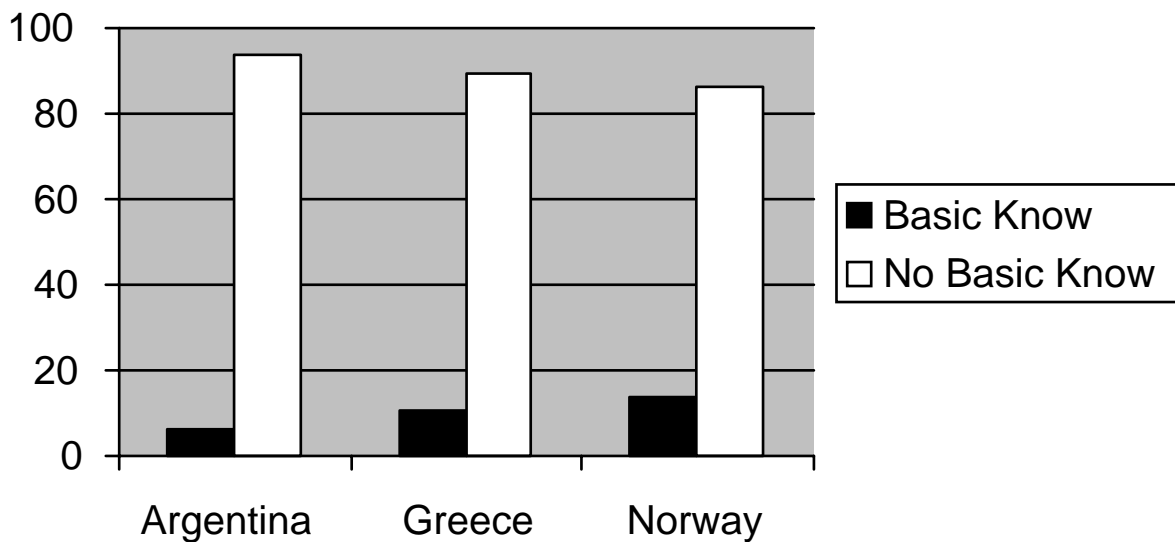


Fig 3. Socio-economic spread of sample in percentages. I: Professional, II: Intermediate, IIIN: Skilled non-manual, IIIM: Skilled manual. IV: Semi-skilled . V: Unskilled manual, VI: unemployed, retired, student.

