Awareness and Usage of Sign Language among Doctors in Main Khartoum Hospitals (Ibrahim Malik, Bahri, Omdurman) October 2017

Sundos Hamza Fadul Modawey

1College of Medicine, University Of Bahri, Khartoum-Sudan

*Corresponding author: Sundos Hamza Fadul Modawey, College Of Medicine, University Of Bahri, Khartoum-Sudan; Tel: +249962599691; E-mail: sandi185315@gmail.com

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Abstract

Background: When a deaf person become ill a big problems are emerge beginning with explanation of their medical issues, understanding of their medical problems, medications, management and their whole condition. So there is an undeniable need for improving the communication between physicians and deaf patients, non-verbal language is a form of communication that needs to be understood and validated in health services and physicians must be trained to deal with them.

Method: Descriptive and cross-sectional study. The duration of the study is one month, with target population 1290 doctor.

Objective: To Evaluate awareness and uses of sign language among doctors.

Results: 112 house officer, 96 registrar, 85 medical officer and 12 consultants returned completed questionnaires. More than half of doctors (52.1%) consulted with deaf patients in their medical practice. Also the most frequent method of communication used were using of relatives and others people for interpreting and communication (22.6%), followed by writing (12.8%), only (11.5%) used sign language and the least used method was the lip reading (4.9%). 95.7% were aware of sign language importance and 68.5% of them were agree with addition of sign language into medical curricula.

Conclusion: This study highlights the deficit in using of sign language among doctors that make the medical consultation with deaf patients less effective. Doctors must be qualified and experienced in dealing with patient having special needs.

Keywords: Deaf patients; Sign language; Doctors-patients relationship

Introduction

Sign language is a language chiefly uses manual communication to convey meaning. This can involve simultaneously combining hand shapes, movement and orientation of the hands, arms or body, and facial expressions to convey a speaker’s ideas. Sign languages often share significant similarities with their respective spoken language (such as ASL and American English); however grammar and sentence structure may vary to encourage efficiency and fluidity in speaking.

Linguists consider both spoken and signed communication to be types of natural language, meaning that they evolved organically and over time. Sign language should not be confused with body language, which is a kind of non-linguistic communication.

Wherever communities of deaf people exist, sign languages have developed, and are at the cores of local deaf cultures. Although signing is used primarily by the deaf and hard of hearing, it is also used by hearing individuals, such as people who can hear but cannot physically speak, or have trouble with spoken language due to some other disability (augmentative and alternative communication).

It is not clear how many sign languages there are. A common misconception is that all sign languages are the same worldwide or that sign language is international. Aside from the pidgin International Sign, each country generally has its own, native sign language, and some have more than one (although there are also substantial similarities among all sign languages). The 2013 edition of Ethnologue lists 137 sign languages. Some sign languages have obtained some form of legal recognition, while others have no status at all.

Sudan and South Sudan have multiple regional sign languages, which are not mutually intelligible. A survey of just three states found 150 sign languages, though this number included instances of home sign. By 2009, the Sudanese National Union of the Deaf had worked out a Unified Sudanese Sign Language, but it had not yet been widely disseminated.

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Methods

Study design: Descriptive and cross-sectional study.

Study area: Omdurman, Bahri, and Ibrahim Malik (the main Khartoum hospitals)

Study population: All consultants, registrars, medical officers, and house officers working in Omdurman, Bahri, and Ibrahim Malik teaching hospitals

Study variables: Category of doctor, consultation with deaf patients, method of communication, and understanding of patient's complaints without sign language, importance of sign language, interest of doctors in learning sign language, adding of sign language into medical curricula, suggestions in how to take care about deaf patients, easiness in learning sign language.

Sample size and Sampling Technique:

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Sample size</th>
<th>Number of questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omdurman</td>
<td>442</td>
<td>104</td>
</tr>
<tr>
<td>Bahri</td>
<td>448</td>
<td>107</td>
</tr>
<tr>
<td>Ibrahim Malik</td>
<td>400</td>
<td>94</td>
</tr>
</tbody>
</table>

Table 1: Total numbers of doctors working in Omdurman, Bahri and Ibrahim Malik teaching hospitals 2017 is 1290 doctor.

Results

- 112 house officer, 96 registrars, 85 medical officers and 12 consultants returned completed questionnaires (Table 2).

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>12</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Registrar</td>
<td>96</td>
<td>31.5</td>
<td>31.5</td>
<td>35.4</td>
</tr>
<tr>
<td>Medical Officer</td>
<td>85</td>
<td>27.9</td>
<td>27.9</td>
<td>63.3</td>
</tr>
<tr>
<td>House Officer</td>
<td>112</td>
<td>36.7</td>
<td>36.7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Specialty of the Doctor.

- More than half of doctors (52.1%) were consulted with deaf patients in their medical practice (Table 3).

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>159</td>
<td>52.1</td>
<td>52.1</td>
<td>52.1</td>
</tr>
<tr>
<td>No</td>
<td>146</td>
<td>47.9</td>
<td>47.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Consultation.

- The most frequent method of communication that used by doctors in their medical consultation with deaf patients were using of relatives and others people for interpreting and communication (22.6%), followed by writing (12.8%), only (11.5%) used sign language and the least used method was lip reading (4.9%) (Table 4).

<table>
<thead>
<tr>
<th>Method of Communication</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign Language</td>
<td>35</td>
<td>11.5</td>
<td>21.7</td>
<td>21.7</td>
</tr>
<tr>
<td>Lip Reading</td>
<td>15</td>
<td>4.9</td>
<td>9.3</td>
<td>31.1</td>
</tr>
<tr>
<td>Interpreters</td>
<td>69</td>
<td>22.6</td>
<td>42.9</td>
<td>73.9</td>
</tr>
<tr>
<td>Writing</td>
<td>39</td>
<td>12.8</td>
<td>24.2</td>
<td>98.1</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>1</td>
<td>1.9</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>161</td>
<td>52.8</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Method of communication.

- Also 95.7% aware of sign language importance (Table 4).

<table>
<thead>
<tr>
<th>Importance of Sign Language</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>292</td>
<td>95.7</td>
<td>95.7</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>4.3</td>
<td>4.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Importance of Sign Language.

- 68.5% agree with adding of sign language into medical curricula (Table 6).

<table>
<thead>
<tr>
<th>Including of sign language in medical curricula</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>209</td>
<td>68.5</td>
<td>68.5</td>
</tr>
<tr>
<td>No</td>
<td>96</td>
<td>31.5</td>
<td>31.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Including of sign language in medical curricula.

- 59% thought that they cannot understand the patient's complaints without knowing of sign language (Table 7).

<table>
<thead>
<tr>
<th>Can understand the patient's complaints</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>125</td>
<td>41.0</td>
<td>41.0</td>
</tr>
<tr>
<td>No</td>
<td>180</td>
<td>59.0</td>
<td>59.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Can understand the patient's complaints.
Also we found that the most frequent method of communication
• 59% of doctors thought that they cannot understand the patient's
impairment of sign language, we compare this with the study done
in Dundee-Scotland which found that only 38% of general
practitioners and 60% of consultants are aware of the sign
language interpreting service importance) the service in which a qualified
trainers use sign language for interpretation[1].
• More than half of doctors (52.1%) consulted with a deaf patients
in their medical practice the thing that show the necessity of learning
sign language which make the consultation easy and effective, also
a study done to explore whether there are other factors besides
communication difficulties that hamper access to health care
services for deaf patients, and they found that Communication
difficulties were found to be a prominent barrier in accessing
health care services. In addition to this interpersonal factors
including lack of independent thought, overprotected, non-
questioning attitude, and lack of familial communication interact
with communication difficulties in a way that further hampers
access to health care services [2].
• Also we found that the most frequent method of communication
were using of relatives and others people for interpreting and
communication (22,6%), followed by writing (12.8%) ,only (11.5%)
doctor used sign language and the least used method was lip
reading (4.9%) , we compare our results with the results from
university of Illinois _ Chicago which found that writing was the
most frequent method used to communicate with deaf patients
,and only 22% used sign language method [3].
• 59% of doctors thought that they cannot understand the patient's
complaints without knowing of sign language, and this will affect
patient's trusting on doctors and decrease their searching for
medical advice, a study was done to examine the effectiveness of a
workshop on increasing osteopathic student physicians' confidence
and knowledge when interacting with ASL-using patients, Students
completed a pre-test , rated their confidence levels and took a
video quiz on basic medical signs, They then attended a 4-hour
workshop and, 2 weeks later, completed a post-test. The result
found that, Video quiz scores increased significantly from pre-test
to post-test. Students also reported increased levels of confidence
in interactions with the Deaf community [4], also this concept
appeared in the deaf community in Tasmania-Australia that
investigated by a study found that health as concept was poorly
understood, including mental health, sexual health, and health
concerning alcohol and drug abuse due to sense of security, trust
and confidence and said that deaf remain underserved by the current
health care system [5].
• Regarding the improvement of doctors awareness and skills in sign
language 68.5% are agree with adding of sign language to medical
curricula, we confirm that by an intervention study that conducted
Two sign language courses to under graduate dental student and
found that it did not remove a communication barrier only but has
assisted in the empathetic and ethical development of the dental
student [6]. (53.8%) think that the doctors should learn sign
language.

### Discussion

The research is conducted in Khartoum state in: Omdurman, Bahri
and Ibrahim Malik teaching hospitals. Data collected from 305 doctors
(104 Omdurman, 107 Bahri, 94 Ibrahim malik) in different categories
(consultants, registrars, medical officers and house officers).

The results found that:

- Medical officers are the most frequent category of doctors
  participated in our research, with high tendency toward filling of
  questionnaire; Followed by house officer and the least category are
  the consultants.
- Approximately most of the doctors (95.7%) aware about the
  importance of sign language, we compare this with the study done
  in Khartoum for their Welcoming.
- More than half of doctors (52.1%) consulted with a deaf patients
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### Table 7: Understanding patient's complaints without knowing sign language.

| Total | 305 | 100.0 | 100.0 |

**Table 7:** Understanding patient's complaints without knowing sign language.

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### Conclusion

A large number of doctors did not use the most appropriate method
(sign language) to communicate with their deaf patients, but they were
interested and felt readiness to learn sign language and agree with
adding of it into medical curricula. When doctors learn sign language
and use it in qualified manner, deaf persons will feel more positive
toward medical advice and consultation; this will improve the medical
services for them. Make a special health centers for deaf patients is a
second chosen suggestion but it restricted by the high financial needed
to be applied, the thing that raise the other option which is teaching of
sign language for doctors and make training courses for them. The
addition of sign language in medical curricula insure that doctors in
the future will have better communication skills, and will become more
qualified and experienced in dealing with patients have special needs.

The conclusion is that we need more efforts to improve our
communication with deaf patients or patients with hearing problems
in order to give them a high quality medical service.

### Acknowledgements

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