

Providing Access to Multilingual Patient Education Materials

Nicole Askin

Access to reliable yet readable health information is key for consumers making health decisions and participating in the management of their care. This presents a particular challenge for patients whose first language is not English: the language barrier makes it difficult for them to understand the counsel and direction of care providers, educational materials available at clinics are most typically in English, and online reliable sources in their own language may be difficult to locate, particularly for those with additional literacy or technological barriers. This article will highlight a pilot project to collate online patient education materials in languages other than English for use by providers in primary care.

Keywords: health literacy, multilingual resources, hospital librarians, patient education

Nicole Askin, MLIS (nicole.askin@umanitoba.ca), Acting Hospital Librarian, Seven Oaks General Hospital Library, University of Manitoba Health Sciences Libraries, 2300 McPhillips St, Winnipeg, Manitoba, Canada, R2V 3M3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

INTRODUCTION

Medical librarians play an important role in providing educational materials to patients to help them better understand their health and participate in their care. These materials should be responsive to the needs of local patients and clinicians, in terms of both the topics covered and the manner in which they are conveyed. When the author attended a local primary-care centre to present the library's patient education materials to clinicians there, two major questions were raised: what is the reading level of these materials, and in what languages are they available. Means of addressing the first question were explored by Leonard (2017) in a previous issue; the second question led to the development of a pilot project to collate online patient education materials in languages other than English for use by providers in primary care.

BACKGROUND

The University of Manitoba Health Sciences Libraries (UMHSL) system supports the students and staff of the university as well as staff at the Winnipeg hospitals, health centres and community-based health facilities, among other patron groups. Libraries located at each hospital provide service to a catchment area of the city. Consumer health materials can be borrowed at UMHSL locations with a free Consumer Health card; the collection is supported by the Dr. Georgina R. Hogg Endowment Fund. Most of the print materials in the collection are in English.

The UMHSL is located in Winnipeg, Manitoba, Canada. The official languages of Canada are English and French, but an estimated 23% of city residents spoke another mother tongue as of 2011. 24 non-official languages had over 1000 speakers in the city, according to

1
2
3
4 census records (Statistics Canada 2012). The Seven Oaks General Hospital Library is located in
5
6 the northwest area of the city, which has large concentrations of speakers of German, Punjabi,
7
8 Polish, and Tagalog, and significant concentrations of speakers of a number of additional
9
10 languages (Statistics Canada 2012). This library serves the Seven Oaks General Hospital and
11
12 several area primary care clinics, such as the NorWest Co-op Community Health Centre, with
13
14 large numbers of clients who speak languages other than English. Staff at NorWest requested
15
16 that the library examine the possibility of providing or recommending resources in the languages
17
18 spoken by their clients. This request was the impetus for this pilot project.
19
20
21
22
23
24
25

26 *LITERATURE REVIEW*

27
28
29
30

31 Multiple authors have previously examined the problem of patient education for individuals with
32
33 a first language other than English. Discussion of patients with limited English proficiency fits
34
35 into a broader discussion of those with low health literacy, or a limited ability to understand
36
37 health-related information. A systematic review by Berkman and colleagues found that low
38
39 health literacy was associated with a range of negative health-related outcomes, including
40
41 increased number of hospitalizations, higher mortality rates, poor compliance with medication
42
43 instructions, and lower rates of screening and preventative health care. McKee and Paasche-
44
45 Orlow (2012) discussed the potential of applying research around low health literacy to the
46
47 problem of patient education for non-English speakers. They noted that both populations are
48
49 likely to experience negative socioeconomic determinants of health, including but not limited to
50
51 reduced access to information and reduced access to care. Sentell and Braun (2012) found that
52
53 low health literacy and limited English proficiency frequently co-occurred, but that the latter may
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 correlate to greater risk for poor health outcomes. This research motivates efforts to provide
5 patient education materials in the language in which they are most likely to be understood.
6
7

8
9 Perera and collaborators (2012) investigated whether providing patients with educational
10 materials in their own language would improve their understanding of their condition and
11 treatment. They found that it did, and that patients preferred having these materials in a language
12 they could more easily understand. Workman and others (2003) advocated for libraries to be
13 involved in providing patient education materials in languages other than English, noting that
14 most online content is in English only. They suggest working with care providers that serve non-
15 English-speaking patients to better understand the needs of clients in the local context.
16
17
18
19
20
21
22
23
24

25
26 Weiss and colleagues (2007) focused on medication instructions, given that correctly
27 administering medications at home is primarily a patient responsibility. They found that although
28 90% of pharmacists surveyed reported serving non-English-speaking clients on a daily basis,
29 there were significant gaps both in identifying those needing assistance and providing
30 linguistically appropriate medication labelling. Bailey and colleagues (2012) sought to address
31 the problems raised by Weiss and others by developing prescription instructions in multiple
32 languages. Their process was first to create instructions aimed at those with low health literacy
33 and then to iteratively translate these into their target languages. They found this process to be
34 cost- and time-intensive, and so potentially unusable for those in resource-limited situations.
35
36
37
38
39
40
41
42
43
44
45
46
47

48 Several authors have proposed alternate means of providing access to non-English patient
49 education materials, other than developing them locally. Friedman and colleagues (2005)
50 discussed the creation of a health information site in Russian. The site's contents are largely
51 patient education materials developed by various English-language organizations, which have
52 been collated in a single site to make them easily locatable for those seeking Russian-language
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 resources. Plumbaum and others (2014) developed a health information system to allow patients
5
6 to search for materials in their native language, including a multilingual ontology. Charbonneau
7
8 and Workman (2002) described a project of digitizing multilingual health education resources to
9
10 a web portal where they could be searched and downloaded. All of these initiatives take as their
11
12 basis the problem that it is currently difficult for inexpert searchers to locate reliable health
13
14 information online, particularly in languages other than English. This is the problem that the pilot
15
16 project attempts to address.
17
18
19
20
21
22

23 *PROJECT*

24
25
26
27
28 As a result of the meeting with NorWest staff, patient education materials in languages other
29
30 than English and at lower reading levels will be considered for long-term collection
31
32 development. However, it is not feasible to quickly develop a broad collection in all languages
33
34 spoken in the community. Thus, alternative, lightly resourced means of providing such materials
35
36 to clinicians needed to be considered. Bibliographies of recommended resources for various
37
38 topics already existed in English, so this approach was chosen to highlight equivalent resources
39
40 in other languages. The project began by identifying a core list of multilingual health websites,
41
42 and then collating resources specific to each topic and language of interest.
43
44
45
46
47

48 Three types of topics were selected for specific handout development: broad
49
50 systems-based overviews (eg. heart disease), major regional conditions and priorities (eg.
51
52 diabetes), and specific topics requested by the NorWest clinicians (eg. smoking cessation). Two
53
54 sets of languages were prioritized: those with large groups of speakers in the area as identified by
55
56 census records (eg. Punjabi), and those identified as priority languages by the NorWest clinicians
57
58
59
60
61
62
63
64
65

1
2
3
4 (eg. Arabic). Supplemental languages with smaller groups of speakers in the area were included
5
6 where possible. Handouts were organized by topic and subdivided by language, with one page
7
8 for each language (see Figure 1 for an example).
9

10
11 **[PLACE FIGURE 1 HERE]**
12

13
14 **FIGURE 1. Front page of the diabetes handout, showing available languages.**
15

16 As with the English-language versions, the handouts were posted on the library website
17
18 and also made available in hard copy for patrons or clinicians. However, unlike the English
19
20 versions, the multilingual handouts consist almost entirely of web sources. Thus, to facilitate the
21
22 use of hard copies, bit.ly was used to create shortened URLs that could more easily be typed into
23
24 a web browser. Each link was accompanied by 2-3 words that described the topic, to allow
25
26 clinicians to quickly locate the most relevant resource; for example, the Diabetes handout
27
28 included entries for foot care and glucose monitoring (see Figure 2).
29
30
31

32
33 **[PLACE FIGURE 2 HERE]**
34

35
36 **FIGURE 2. Diabetes in Cree handout**
37

38 As noted by Friedman and colleagues (2005), most of the reliable resources located
39
40 online were developed by English-language organizations, including governments and non-
41
42 profits. For this project Canadian materials were prioritized where possible because of their
43
44 applicability to the local context and for avoidance of confusion. For example, the New South
45
46 Wales (Australia) Ministry of Health has a number of excellent resources on their Multicultural
47
48 Health Communication website (<mhcs.health.nsw.gov.au>), but these advised patients to call
49
50 000 in an emergency, rather than the US and Canadian equivalent 911. Some resources provided
51
52 a side-by-side English translation of the non-English text, which was very helpful in assessing
53
54 compatibility with local practice.
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 Resources were located first by checking the core multilingual health websites identified
5
6 at the start of the project, and then where necessary using the keywords from those resources to
7
8 try to locate additional sources. However, the sources of resources identified via the latter
9
10 method were vetted to ensure their authoritativeness. In instances where no authoritative sources
11
12 could be found for a particular topic and language, no handout for that combination was created.
13
14 Since assessment of resources in languages other than English is challenging, when a resource
15
16 was in doubt it was not included. Where possible, reliable online video or audio resources were
17
18 also included, to serve those with low literacy in any language. However, this represented a
19
20 relatively small proportion of available resources.
21
22
23
24
25
26
27

28 ***FUTURE WORK***

29
30
31
32
33 Ongoing maintenance and evaluation will be a necessary component of future work on this
34
35 project. As with any web-based resources, the entries in these handouts are subject to link rot and
36
37 need to be checked regularly. They are also updated in response to clinician feedback and, when
38
39 library staff is aware of them, newly published resources. Thus far, there has been no direct
40
41 feedback from patients with regards to the utility of their care providers or they themselves
42
43 having access to these handouts. While it is expected based on the work of Perera and colleagues
44
45 (2012) among others that this patient education opportunity would have a positive impact, direct
46
47 evaluation of this particular context would be an avenue for further work. In particular, it would
48
49 be helpful to understand which sources of material are and are not helpful, to better guide further
50
51 development of the handouts. Evaluations of video versus print-only patient education materials
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 have been conducted in English (cf. Laszewski et al 2016; Prakash et al 2013); it would be useful
5
6
7 to know whether these findings hold true in the context of non-English-speaking patients.
8

9 Another area for future work is the development of print collections in languages other
10
11 than English. While web resources are convenient in that they can be viewed and printed from
12
13 anywhere with Internet access, in some contexts print is preferable. The library has added several
14
15 non-English resources to its collection in response to requests from clinicians. The local public
16
17 library also has patient education materials in various languages, although as their indexing is
18
19 incomplete they can be difficult for inexpert searchers to locate and use. Ideally local healthcare
20
21 organizations could develop context-specific print resources on various health topics, but
22
23 because of resource limitations this is unlikely in the near future.
24
25
26
27
28
29
30

31 **REFERENCES**

32
33
34
35

- 36 Bailey, Stacy Cooper, Romana Hasnain-Wynia, Alice Hm Chen, Urmimala Sarkar, Alisu
37
38 Schoua-Glusberg, Lee A. Lindquist, Dean Schillinger, and Michael S. Wolf. 2012. “Developing
39
40 Multilingual Prescription Instructions for Patients with Limited English Proficiency.” *Journal of*
41
42 *Health Care for the Poor and Underserved* 23(1): 81–87. doi:10.1353/hpu.2012.0000.
43
44
45 Berkman, Nancy D., Stacey L. Sheridan, Katrina E. Donahue, David J. Halpern, and Karen
46
47 Crotty. 2011. “Low Health Literacy and Health Outcomes: An Updated Systematic Review.”
48
49 *Annals of Internal Medicine* 155(2): 97–107. doi:10.7326/0003-4819-155-2-201107190-00005.
50
51
52 Charbonneau, Deborah H., and T. Elizabeth Workman. 2002. “Providing Online Health
53
54 Information in Many Languages.” *Journal of Hospital Librarianship* 2(3): 39–49.
55
56
57
58 doi:10.1300/J186v02n03_04.
59
60
61
62
63
64
65

1
2
3
4 Friedman, Yelena, Luda Dolinsky, and Rimma Perelman. 2005. "Providing Access to Consumer
5 Health Information for the Russian-Speaking Population." *Journal of Consumer Health on the*
6
7
8
9 *Internet* 9(1): 25–32. doi:10.1300/J381v09n01_03.

10
11 Laszewski, Pamela, Cynthia Zelko, Lena Andrihts, Eva Vera Cruz, Carole Bauer, and Morris A.
12
13
14 Magnan. 2016. "Patient Preference for Instructional Reinforcement Regarding Prevention of
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

Laszewski, Pamela, Cynthia Zelko, Lena Andrihts, Eva Vera Cruz, Carole Bauer, and Morris A.
Magnan. 2016. "Patient Preference for Instructional Reinforcement Regarding Prevention of
Radiation Dermatitis." *Clinical Journal of Oncology Nursing* 20(2): 187–91.
doi:10.1188/16.CJON.187-191.

Leonard, Kelsey. 2017. "Evaluating Patient Education Materials for Grade Level." *Journal of
Consumer Health on the Internet* 21(1): 87–94. doi:10.1080/15398285.2017.1280347.

McKee, Michael M., and Michael K. Paasche-Orlow. 2012. "Health Literacy and the
Disenfranchised: The Importance of Collaboration between Limited English Proficiency and
Health Literacy Researchers." *Journal of Health Communication* 17(Suppl 3): 7–12.
doi:10.1080/10810730.2012.712627.

Perera, K. Y. S., Priyanga Ranasinghe, A. M. M. C. Adikari, B. Balagobi, G. R. Constantine, and
Saroj Jayasinghe. 2012. "Medium of Language in Discharge Summaries: Would the Use of
Native Language Improve Patients' Knowledge of Their Illness and Medications?" *Journal of
Health Communication* 17(2): 141–48. doi:10.1080/10810730.2011.585926.

Plumbaum, Till, Sascha Narr, Elif Eryilmaz, Frank Hopfgartner, Funda Klein-Ellinghaus, Anna
Reese, and Sahin Albayrak. 2014. "Providing Multilingual Access to Health-Related Content."
Studies in Health Technology and Informatics 205: 393–97.

Prakash, Sateesh Reddy, Siddharth Verma, John McGowan, Betsy E. Smith, Anjali Shroff,
Gregory H. Gibson, Michael Cheng, Douglas Lowe II, Kavitha Gopal, and Smruti R. Mohanty.
2013. "Improving the Quality of Colonoscopy Bowel Preparation Using an Educational Video."

1
2
3
4 *Canadian Journal of Gastroenterology = Journal Canadien De Gastroenterologie* 27(12): 696–
5
6
7 700.

8
9 Sentell, Tetine, and Kathryn L. Braun. 2012. “Low Health Literacy, Limited English Proficiency,
10
11 and Health Status in Asians, Latinos, and Other Racial/Ethnic Groups in California.” *Journal of*
12
13 *Health Communication* 17(Suppl 3): 82–99. doi:10.1080/10810730.2012.712621.

14
15
16 Statistics Canada. 2012. “2011 Census Profile.” Accessed April 5, 2017.

17
18
19 <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E>.

20
21 Weiss, Linda, Francesca Gany, Peri Rosenfeld, Olveen Carrasquillo, Iman Sharif, Elana Behar,

22
23 Emily Ambizas, Priti Patel, Lauren Schwartz, and Robert Mangione. 2007. “Access to

24
25
26 Multilingual Medication Instructions at New York City Pharmacies.” *Journal of Urban Health:*

27
28
29 *Bulletin of the New York Academy of Medicine* 84(6): 742–54. doi:10.1007/s11524-007-9221-3.

30
31 Workman, T. Elizabeth, Nancy T. Lombardo, and Jeanne Marie Le Ber. 2003. “Overcoming

32
33
34 Language Barriers When Providing Health Information.” *Journal of Consumer Health on the*

35
36
37 *Internet* 7(2): 23–33. doi:10.1300/J381v07n02_03.



Seven Oaks General Hospital Library
204-632-3124 • soghlibrary@umanitoba.ca
<http://libguides.lib.umanitoba.ca/sogh>

Consumer & Patient Health Information Service Diabetes Resource Guide (Multilingual)

The University of Manitoba Health Sciences Libraries' Consumer Health Information Service provides both print and electronic resources for patients, families, and members of the general public. We have compiled online resource lists for patients who speak languages other than English. This topic includes the following languages:

- Amharic
- Arabic
- Bengali
- Bosnian
- Chinese
- Cree
- Farsi (Persian)
- German
- Greek
- Gujarati
- Hindi
- Italian
- Korean
- Lao (Laotian)
- Nepali
- Ojibwe
- Polish
- Portuguese
- Punjabi
- Russian
- Somali
- Spanish
- Tagalog
- Ukrainian
- Urdu
- Vietnamese

To see other available resource lists, or to request other topics or languages, please contact us: <http://libguides.lib.umanitoba.ca/sogh>



Seven Oaks General Hospital Library
204-632-3124 • soghlibrary@umanitoba.ca
<http://libguides.lib.umanitoba.ca/sogh>

Consumer & Patient Health Information Service Diabetes Guide (Cree)

These sites give information in Cree on topics related to diabetes.

- Intro to diabetes: <http://bit.ly/2gin3TR>
- Just the Basics: <http://bit.ly/2gPPLyM>
- Just the Basics (video): <http://bit.ly/2gPOWWF>
- Type 2 diabetes: <http://bit.ly/2gWtlrR>
- Diabetes and nutrition: <http://bit.ly/2gIqbid>
- Exercise and diabetes: <http://bit.ly/2ginwoU>
- Bodyweight and diabetes: <http://bit.ly/2fQjvvT>
- Alcohol and diabetes: <http://bit.ly/2git5DW>
- Diabetic foot care: <http://bit.ly/2fQaa7h>
- Monitoring glucose levels: <http://bit.ly/2gWsyrg>