Collecting clinical experience of homeopathic support in COVID-19

Eleventh issue

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Testing the mini-repertory app

In the previous newsletter (tenth issue) we presented a new mini-repertory for COVID-19 like illness, regarding the three most prescribed homeopathic medicines: *Arsenicum album (ars)*, *Bryonia (bry)* and *Gelsemium (gels)*. The repertorisation algorithm was based on Bayes' theorem and likelihood ratio (LR). The advantage of LR (= (prevalence in medicine population) / (prevalence in remainder of the population) is that it discriminates between medicines better than in our well-known repertories. Some of the symptoms with their LRs are shown in Table 1.

The app supporting the repertorisation for symptoms in the mini-repertory is available at the website address https://hpra.co.uk/.

Table 1: occurrence of four symptoms in the research population of 161 patients and in populations responding well to Arsenicum album (ars), Bryonia (bry) and Gelsemium (gels)*, with the corresponding LRs.*

Symptoms	**Count**	**ars**	**LRars**	**bry**	**LRbry**	**gels**	**LRgels**
n=	**161**	21		45		25	
fatigue	**87**	11	0.96	20	0.77	20	1.62
dry cough	**73**	8	0.82	26	1.43	10	0.86
dyspnea	**51**	5	0.72	18	1.41	4	0.46
headache	**48**	6	0.95	17	1.41	9	1.26

An example demonstrates the difference which LR makes: the symptom 'fatigue' was present in 87 out of all 161 cases, and in 11 out of 21 *ars* cases, in 20 out of 45 *bry* cases and in 20 out of 25 *gels* cases. In the existing repertory this would have resulted in bold entries for all three medicines under the rubric 'Fatigue in COVID-19'. In the Bayesian repertory we see LR= 1.62 for *gels* and LR=0.77 for *bry*. This can be understood as a slight confirmation for *gels* if the symptom is present and a slight contra-indication for *bry*. Such differences can be demonstrated only by noting the same symptom in a considerable number of cases who responded well to the same medicine.

The homeopathic principle that one symptom, or a diagnosis, is insufficient to choose a homeopathic medicine accurately is even more relevant for common symptoms. Using the existing repertory, the combination of the symptoms 'fatigue' and 'headache' would not give us any indication of the appropriate medicine. Only after finding a keynote symptom for *gels*, like 'Chill running up and down the back', we would say: "Yes, headache and fatigue confirm *gels*". To be able to demonstrate that the combination of fatigue and headache indicates, say, *gels* more than *ars*, we would start by asking for symptoms that confirm *gels*, like 'chill running up and down the back', or we might observe that the patient can hardly keep his eyes open.

The Bayesian repertory enables better use of common – and therefore relatively unimportant – symptoms. LR shows small but clinically relevant differences between medicines which have the same typology in the standard repertory, and a combination of such common symptoms can result in larger differences between medicines. To give an example: the combination of 'fatigue' plus

'headache' results in a combined LR= 1.62 x 1.26 = 2.04 for *gels* and LR= 0.96 x 0.95 = 0.91 for *ars*. The combined LR for *gels* now becomes more than twice as large for *gels* than for *ars*.

With this procedure we can take a combination of formerly quite useless symptoms and turn this into a meaningful indication for specific medicines. This is especially useful if the patient has no symptoms that clearly indicate a specific medicine. The downside of LR, however, is that we have to make the necessary calculations. This is easily performed in a computerised repertory, but where this is not available we can use the app mentioned above.

The app contains the 20 most frequently occurring symptoms from a collection of 161 COVID-19 cases. It calculates combined LRs for specific medicines from a selection of these symptoms. Currently, the app can differentiate between only three medicines: *ars, bry* and *gels*. Other medicines and other symptoms can be added when enough cases have been gathered. One symptom we would like to add is 'loss of taste and/or smell', because this is a typical COVID-19 symptom, but the data we have so far do not yet show a clear difference between medicines.

Testing the app with real cases

Recently, a collection of case studies involving COVID-19 was published with 18 cases; these responded well to *ars* (one case), *bry* (four cases), *gels* (12 cases) and *Eupatorium perfoliatum (eup-p)* (one case).[1] The cases were presented with clear descriptions of background, symptomatology and outcome. This, as well as the fact that all cases except one responded to the medicines present in the app, offered an opportunity to test the app with the symptoms seen in these cases.

The advantage of frequently occurring symptoms is that many patients have such symptoms. The disadvantage is that precisely this fact also causes the medicines to be less well differentiated. The clinical database we have so far contains 87 patients with 'fatigue' spread over the 36 medicines prescribed in 161 cases. The symptom 'fatigue, cannot keep his eye open', however, occurs in only 4 cases, all of which are *gels*.

For a first screening, e.g. with a standard questionnaire, the symptom 'fatigue' would be more useful than 'fatigue, cannot keep his eyes open' because the first occurs 22 times more frequently than the latter. On the other hand, a first screening is useful only if it indicates specific medicines that can be explored further.

However, it is vital that the first screening does not lead us in the wrong direction. To check this we need confirmed cases with an adequate number of common symptoms, combined with more specific symptoms that give a clear picture of the effective medicine. The common symptoms available in the app can be entered into this, and the output of the app should not contradict the recommendation that results from a full analysis of the case.

The question was: does the use of only the most frequently occurring symptoms in an initial screening give results that are consistent with the outcome of the standard homeopathic method using all available symptoms, general and particular?

How it works can be shown by case HK1.1. The observed symptoms were:

1. Slow onset and progression of symptoms.
2. Feeling irritable from the cough; does not want to talk to anyone. Prefers to be alone.
3. Obvious increase in thirst with desire to drink warm water in large quantity.
4. Generally ameliorated after perspiration.

5. Mainly dry cough, with very occasional greenish sputum.
6. Extremely bad pulsating temple headache and middle chest pain aggravated from coughing.
7. Cough aggravated by talking and lying down, and after waking up in the morning.
8. Cough associated with tickling feeling in the throat, ameliorated by warm drinks.

Out of these 5 symptoms could be found in the app:

1. Thirst
2. Dry cough
3. Headache
4. Chest pain < cough
5. Cough < talking

The outcome of the app was "Strong indication for Bryonia" and this was indeed the medicine that was prescribed. An experienced homeopathic practitioner will recognise the medicine at first sight because of symptoms like 'irritable from cough', 'aversion to company', 'thirst for large quantities' and 'headache from cough', which are not in the app. However, with the combination of symptoms 'thirst', 'dry cough' and 'headache' the app would already have returned a "Moderate indication for Bryonia". This results from the following LRs for *bry*: LR=3.31 for thirst; LR=1.43 for dry cough and LR=1.41 for headache. The combined LR for these three symptoms is 3.31 x 1.43 x 1.41 = 6.67, high enough for a 'moderate indication'. 'Chest pain < cough' adds LR=3.61 and 'Cough < talking' LR=1.47, rendering a combined LR=35.4, representing a strong indication.

The outcome of all cases is shown in Table 2. If the combined LR of the selected symptoms was between 3 and 6, the indication was 'slight'; if the combined LR was between 6 and 10, the indication was 'moderate' and if combined LR>10, the indication was 'strong'.

Table 2: advice e of the app after entering the symptoms available in 18 cases. The 'Nr case symptoms' is the number of symptoms described for each case. 'Nr app symptoms' is the number of these symptoms available in the app. 'App advised medicine' represents the advice of the app with intensity.

Case	prescribed medicine	Nr case symptoms	Nr app symptoms	App advised medicine
HK1.1	bry	8	5	bry (strong)
HK2.1	bry	12	5	bry (slight)
HK3.1	bry	18	6	bry (strong)
HK3.2	gels	14	5	gels (strong), bry (slight)
HK3.3	gels	11	4	gels (moderate)
HK3.4	gels	12	3	gels (strong)
HK3.5	gels	12	6	gels (strong), bry (slight)
HK4.1	gels	5	4	gels (strong)
HK4.2	gels	5	4	gels (slight), bry (slight)
HK4.3	ars	5	4	ars (slight), gels (slight)
HK4.4	gels	5	4	gels (moderate)
HK4.5	gels	7	4	gels (strong)
HK5.1	gels	8	4	gels (strong)
HK5.2	bry	9	6	bry (moderate), gels (moderate)
HK5.3	gels	6	3	bry (slight)
HK5.4	gels	6	3	bry (slight)
HK5.5	eup-p	4	4	bry (slight), gels (slight)
HK6.1	bry	21	10	bry (strong)

Discussion

This set of cases contained only one case (HK5.5) that could not be handled by the app, because it contained no data for that particular medicine (*eup-p*). In this case, the app gave only slight indications, but did not contradict the choice based on a full homeopathic evaluation by offering a moderate or strong indication for one of its own medicines.

In the remaining 17 cases, for 11 (65%) the recommendation of the app was entirely consistent with the full homeopathic evaluation, giving a moderate or strong indication for the prescribed medicine. In one case (HK5.2), a second medicine came up to the same degree; in this case, a specific symptom, 'coldness up and down the back' (not available in the app), clarified the choice of *gels*. In three cases (HK2.1, HK4.2, HK4.3) the recommendation was consistent but with only a slight indication; it did not, though, contradict the definitive choice. In these cases, the full evaluation clarified the choice because specific symptoms indicated the correct medicine. In two cases (HK5.3, HK5.4), the recommendation of the app slightly contraindicated the correct choice which was made on the basis of specific symptoms, such as 'Heaviness of the eyelids', which clearly indicated the relevant medicine.

Our results confirm that the app can be useful where there are no specific symptoms and that the most frequently occurring symptoms can give useful indications for medicine selection in COVID-19 cases. The app can be used as an addition to a full homeopathic consultation and evaluation of symptoms.

There is another potential application for this app. Suppose you encounter a new outbreak of COVID-19 disease and the number of cases is more than you can handle. In this case, an inexperienced practitioner (or homeopathic student) could carry out the first screening with the app and an experienced practitioner could do any necessary additional homeopathic consultation. This would save a lot of time.

As we collect more cases, the app can be extended with more medicines and more symptoms. It will also be possible to fine-tune the output of the app by changing cut-off values for specific recommendations.

How to improve the app further?

We hope that our newsletters will encourage you to use the app to see what value it has. Naturally, you will want to see more medicines in the app, but this can only be achieved with your help, with your cases.

Remember that we are not trying to *prove* anything with this research, we want to *improve* our practice! In any case you submit, you should be satisfied that one specific homeopathic medicine was responsible for the improvement. Try to explain why this was the case.

We summarise below the minimum data necessary for this project. We already had:

- Severity of COVID-19 illness: Mild – Moderate – Severe – critical
- Is COVID-19 confirmed?
- Medicine, with date of first intake
- Number of hours until onset of improvement and/or until absence of fever after the start of the medicine
- If possible at least 3-5 symptoms that were characteristic for the case
- Pneumonia on X-ray or CAT

Also check:

- Onset of complaints: how many hours/days between first symptoms and the moment the disease aggravated
- Fatigue/prostration/exhaustion; where is the weakness located
- Fear/anxiety
- Restlessness
- Fever, chill, or chill alternating with fever
- Thirst
- Pain; where
- Cough dry or moist
- Dyspnea
- Throat pain
- Loss of taste and/or smell
- diarrhoea

The LMHI COVID-19 case collection team:
Lex Rutten, Bernardo Merizalde, Robbert van Haselen, Raj Kumar Manchanda, Ashley Ross, Gustavo Cataldi, Altunay Agaoglu, Tiziana di Giampietro, Lefteris Tapakis, Theodore Lilas, Peter Gold, Frederik Schroyens, José Eizayaga

References

[1] To, Ka Lun Aaron; Fok YYY. Homeopathic Clinical Features of 18 Patients in COVID-19 Outbreaks in Hong Kong. *Homeopathy*. 2020;109.