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ARTICLE

Title: Role of voice and speech in depression : A homoeopathic overview

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ABSTRACT

With the hustle & bustle of the new age culture of living, mental disorders are on a rapid rise. Among these Major Depressive Disorder (MDD) lies as the top psychiatric problem for which patients seek medical healthcare. However though this disorder is so violently depriving the mass of its natural, stable and amiable happy state and functioning the instruments and aids of diagnosing it at an early stage are quite few. Voice and speech have been found to be useful observations in diagnosing patients with depression. This article aims at finding the use and role of voice and speech in diagnosing an early picture of the disease so that timely help can be provided to patients. Homoeopathy is a brilliant holistic & individualistic science which recognizes even subtle changes in human health & behaviour. An array of symptoms related to voice and speech are found in homoeopathic repertories which could come out as a handy tool for observation in such patients.

Keywords: *Depression, Voice, Speech, Homoeopathy*

ABBREVIATIONS:

MDD: Major Depressive Disorder, MSE: Mental status examination, HDRS: Hamilton Rating Scale for Depression, BDI: Beck Depression Inventory

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INTRODUCTION

Depression has been rising up with an ever increasing prevalence creating massive social burden worldwide.^[1] Still there are not many diagnostic tools to detect major and minor depression making it difficult to reach an objective indicator.^[1] Previous studies have shown link between diminished expressivity and neurocognitive dysfunctions.^[3] Production of voice is an adapted & learned laryngeal function requiring highly integrated and precise neurophysiological control. Voice plays a very important role in the transmission of verbal and emotional messages. It impacts the formation of interpersonal relationships and impacts daily activities.^[4] A growing body of research studies have shown the interrelation between voice and the emotional states and it has been suggested that the emotional states can be either primary or secondary to the voice problem. The influence of emotions and personality on voice & the role of voice as a personality trait & a means of expressing emotions has led to a large number of researches.^[4] Various studies have shown observations in Abnormalities in vocal expression during a depressed episode and compared these vocal differences among healthy and depressive persons.^[5] A sensitive indicator of neurologic function, can be achieved by speech evaluation and may reflect neurotransmitter defects in psychiatric illness.^[6] New age devices are coming in order to make accurate identification of the mental status of a patient by the analysis of voice recordings of the

patients.^[7]

A pilot study on 13 depressed subjects showed seven of the speech dimensions found to be most consistently altered in depression which showed significant improvement after treatment for depression.⁶ Following speech dimensions were observed in the study : Reduced stress, Monopitch, Monoloudness, Pitch level, Loudness level, Harsh voice, Loudness decay, Continuous-breathy, Imprecise consonants, Intelligibility, Short phrases, Hypernasal, Rapid rate, Variable rate, Increased rate segments, Bizarreness, Transient breathy & Short rushes. The study reported that depressed individuals demonstrated prosodic speech abnormalities reflecting reduced vitality.^[6] Another comparative study conducted on 44 MDD patients showed more & long pauses, a flatter and consistent pitch i.e. monotonous speech and n moderately depressed individuals than mildly depressed individuals.^[8] A difference in word count was also reported in depressed individuals, increased word count was observed while negative storytelling while decreased word count was observed while positive storytelling signifying a greater tendency for increased negative emotions words among depressed individuals.^[8] A study on 68 patients in Brazil indicated that voice therapy is effective in improving voice quality and to detect and reduce anxiety & depression symptoms in the patients.⁹ Four Brain structures namely- the motor cortex, the supplementary motor area, the basal ganglia

and the cerebellum have been identified as differential contributors of speech production systems. Studies suggest that changes in speech patterns as observed in depression could be due to the influence of altered dopamine levels on basal ganglia. A cross sectional study on 7 subjects showed significant correlation of reduced speaking rate with symptom severity.^[10]

A number of studies have reported changes in speech & voice patterns in patients suffering from depression.

- Dead and listless
- Narrow pitch range and reduced emphatic accent (stress)
- Voice as uniform and monotonous
- Lifeless quality of voice with decreased loudness and inflection
- Reduction in vocal intensity
- Voice pattern characterized as dull and lacking in vitality
- Prosodic speech abnormalities
- Tendency to trail off at ends of utterances
- Pitch inflection and stress patterns settled into a sing-song repetitious drone.
- Lack of loudness and loudness variability (monoloudness) giving impression of reduced respiratory drive
- Reduced effort expended in speaking
- Slow rate, inappropriate silences, or prolonged intervals dimensions.
- More time to read a paragraph
- Reduced pitch, reduced loudness, and harshness^[6]
- Jitter (irregularity in pitch, which can manifest as a wavering or unstable quality in the voice)^[8]

HOMOEOPATHY & DEPRESSION

Homoeopathy is a branch of medical science and holistic care of medicine which recognizes the importance of signs and symptoms even before any pathological change has occurred. Viewing the totality of the picture especially in terms of mental symptoms & behavior of the patient plays a

vital role in the procedure of homeopathic treatment. Another structured assessment method which thoroughly examines the patient's behaviour and cognitive functioning is mental status examination followed in the branch of Psychiatry. One of the major components of MSE is assessment of motor and speech activity in examining the patient which can be utilized to elicit certain peculiar mental symptoms, comprehend appropriate rubrics to find the right similitum for each and every case of disease.^[2]

An array of symptoms related to speech & voice are listed in homoeopathic repertories some of which are mentioned below which can be helpful in early detection of depression in individuals while also providing appropriate, unique & individualized approach of treatment.^[2]

Rubrics related to changes in voice:

- Mind; loquacity; voice, with weak: gels
- Mind; sadness; voice, with loss of: FERR
- Mind; sadness, depression; voice, with loss of: FERR
- Mind; talk, talking, talks; reiterating, doe-doe-doe, in a painfully plaintive voice
- Mind; whistling; low, soft voice: VIOL-O
- Speech & voice; aphonia
- Speech & voice; bass voice: brom camph carb-n-s CAUST DROS HYDROG kola laur mag-s par phos plac pop-c sanguin-n stann sulph sumb verb
- Speech & voice; broken; voice: am-caust arum-t CAMPH choc iod merc perl phos plb seq-g tab tub
- Speech & voice; cracked voice: arum-t camph cann-s DROS galph GRAPH hep lach sil SPONG
- Speech & voice; deep voice: am-caust ARN ARUM-T BAR-C BROM CAMPH CARB-V CAUST cham CHIN COLCH diosp-k DROS ferr HYDROG PHOS PLAC SAMB SPONG STANN SULPH VERB
- Speech & voice; deep voice; women, in: sep
- Speech & voice; exertion of voice agg.: alum am-br ant-c ARG ARG-N ARN ARUM-T camph CAPS CARB-V CAUST FERR-P GRAPH lac-c MERC PHOS RHUS-T SEL SENEG STANN

- Speech & voice; weak voice
- Speech & voice; weak voice; reading aloud
agg.: CYCL stann zinc
- Speech & voice; weak voice; talking amel.:
BELL
- Speech & voice; whispering voice
- Speech & voice; toneless voice: agn ambr
ARG ars-h asaf CALAD CAMPH cann-i
carb-an chin cina cupr DROS HEP lyc lyss
MANG micro-a nat-c rhod samb SPONG
STRAM sulph thuj verat
- Speech & voice; tremulous voice: ACON
agar ARS CAMPH canth cer-p COCC cupr
gels haliae-lc IGN iod kali-i lach laur MERC
MERC-V mez NUX-M op PHOS plb psor tax
xan
- Speech & voice; tremulous voice; sadness,
with: IGN
- Speech & voice; guttural voice: ars gels
- Speech & voice; hoarseness
- Speech & voice; low voice; soft, and: ANG
ANT-C bell c-di-o cann-s CANTH carb-an
CAUST CHAM CHIN HEP ign IP laur LYC
mosch nux-v op par PULS SEC SPONG stann
STAPH tab VERAT VIOL-O
- Speech & voice; monotonous voice: alum
ambr anh aur-m BERB-A bry calc-hp dros
ferr-pic graph halo irid kali-c mang mang-acet
mang-o nat-m ros-ca SEP spong stram tab
- Speech & voice; muffled voice: am-caust
BERB-A caust cocain gels lach lyc PETR ric
rumx sul-ac sumb
- Speech & voice; rough voice
- Speech & voice; broken; voice: am-caust
arum-t CAMPH choc iod merc perl phos plb
seq-g tab tub
- Speech & voice; changeable, changed;
voice
- Speech & voice; changeable, changed;
voice; changes timbre continually: ant-c arg
ARUM-T bell carb-v caust CON dros
GRAPH lach rumx SEP SPONG STRAM
- Speech & voice; soft voice: sumb^[11]

Rubrics related to speech:

- Speech & voice; awkward speech: BOV
CALC NAT-C pall petr plat posit
- Speech & voice; babbling speech: cocc con
cortico dulc gels HYOS lach lyc neon plb sel
STRAM.

- Speech & voice; difficult speech
- Speech & voice; difficult speech; tries,
although she: CIMIC
- Speech & voice; difficult speech; words;
single, can utter, with great exertion: art-v
cocc lach STRAM
- Speech & voice; difficult speech; breath,
from want of: apoc mez PH-AC RAN-B sil
- Speech & voice; finish sentence, cannot: ars
CANN-I cimic colch dios haliae-lc irid lach
lampr-s MED merc-k-i pop-c thuj
- Speech & voice; hoarseness; speech, with
difficult: arum-t calc CAUST cupr MAG-M
nicc NIT-AC par PHOS puls sep
- Speech & voice; interrupted speech:
ALUM am-caust ARS arum-t CAMPH cann-
i chel CIC cupr dros EUPHR GRAPH iod
lach MAG-C merc phos plb SPONG tab
- Speech & voice; wanting, lost; syllables
omitted, single: PLB
- Speech & voice; monosyllabic speech: atro-
s bell benz carb-n-s carc cimic crot-c gels
haliae-lc hyos hyper kali-br lac-leo mag-m
meli meli-a merc mur-ac NUX-V oxyg PH-
AC plb PULS pyrog sanic scorp sep spong
succ SUL-AC sulph thiosin THUJ tritic-v
TUB VERAT
- Speech & voice; mumbling speech: aether
APIS ARG-N ART-V asaf aur bar-acet BAR-
C BELL calad CAMPH caps COCC CROT-
H galph hyos kali-p lach MUR-AC NIT-S-D
nux-v op PH-AC PHOS plb raph RHUS-T
SIL stram SULPH tarent VERAT vesp
- Speech & voice; slow speech
- Speech & voice; slow speech; drag out
words, has to, to express ideas, forgets the
chief points: podo SEP.
- Mouth-Speech, swallowing his words- Cic,
Staph, thuj
- Mouth-Speech, Thick, slurred
- Mouth-Speech, Repeats, everything said to
him, ... the same thing
- Mind; talk, talking, talks; hesitant: ABSIN
agar AGN amyg-am blatta canth con dirc
graph hell herin hyper iodof lant-c lant-o lat-
m laur lsd schis-g sec sumb
- Speech & voice; stopping speech, suddenly,
often: mag-c
- Speech & voice; subdued speech: IGN
tab^[11]

Rubrics related to changes in voice and speech in terms of behaviour:

- Mind; answer, answering, answers; abruptly, shortly, curtly
- Mind; answer, answering, answers; abruptly, shortly, curtly; grunting, by: atro
- Mind; answer, answering, answers; aversion to
- Mind; answer, answering, answers; confusedly as if thinking of something else: bar-m HELL mosch op puls tanac
- Mind; answer, answering, answers; difficult
- Mind; answer, answering, answers; disconnected: BELL coff coff-t CROT-H croto-t kali-br lac-eq LYC OP phos plect stram stry
- Mind; answer, answering, answers; hardly: iod
- Mind; answer, answering, answers; hesitating: graph iodof lant-o sec
- Mind; answer, answering, answers; monosyllabic
- Mind; answer, answering, answers; monosyllabic; no to all questions
- Mind; answer, answering, answers; monosyllabic; no to all questions; or yes
- Mind; answer, answering, answers; nods, by: cyt-l nit-ac PULS
- Mind; answer, answering, answers; reflects long
- Mind; answer, answering, answers; refuses to
- Mind; answer, answering, answers; reluctantly
- Mind; answer, answering, answers; shortly
- Mind; answer, answering, answers; slowly^[11]

OBSERVATION & DISCUSSION IN PREVIOUS HOMOEOPATHIC RESEARCHES:

A large number of homoeopathic medicines have been found to be useful in cases of depression. A study on 83 individuals suffering from depression showed significant improvement in HDRS and BDI scores at the end of 6 month treatment period. Most frequently used medicines were Natrum muriaticum (n = 18), Arsenicum album (n =

12), Pulsatilla nigricans (n = 11), Lycopodium clavatum (n = 7) and Phosphorus (n = 6).¹² Another study on 32 adolescent patients of depression showed satisfactory evidence of overall improvement where HDRS-17 Score Baseline Vs HDRS-17 Score at 6 months: Mean was reduced from 15.5 (SD 3.464) to 8.71 (SD 3.87) 95% CI 1.29 to 1.02 to 1.42, P < 0.05. PHQ-9 Score Baseline Vs PHQ-9 Score at 6 months: Mean was reduced from 15.28 (SD 4.09) to 7.31 (SD 4.78), 95% CI 1.51 to 1.30, to 1.74, P < 0.05. The most commonly used medicines were Pulsatilla, Natrum Mur, Staph, Ignatia & Sepia.¹³ A prospective, non-comparative, open-label observational study done at Multi-Specialty Clinic and Research Centre of The Andhra Pradesh saw marked improvement in 39 cases; moderate improvement in 76; mild improvement in 34 cases; no improvement was in 26 cases among 175 cases of patients aged between 15 and 30 years, presenting with symptoms of depressive disorders. With positive role of Ignatia, Nat mur, Nux vomica, Staphysagria, Arsenicum album and Lycopodium were found.^[14]

CONCLUSION

Though a large number of studies have reported apparent beneficial results for depression with the help of homoeopathic medicines, evidence for the use of speech and voice rubrics in the treatment of depression are quite insufficient in the studies. But as shown in repertory, speech & voice rubrics have been found in various drug proving experiments. Thorough study of patients' voice, speech and behaviour will play a vital role in attaining objective symptoms. Therefore, this article aims to help to explore this very prime part i.e. speech and voice rubrics which may provide a diagnostic and relevant approach of homoeopathic case taking in depressive individuals.

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REFERENCES

1. Shin D, Cho WI, Park CH, Rhee SJ, Kim MJ, Lee H, Kim NS, Ahn YM. Detection of minor and major depression through voice as a biomarker using machine learning. *Journal of clinical medicine*. 2021 Jul 8;10(14):3046.
2. Gilla D, Rana DK, Deepak KP. Application of mental status examination in homoeopathic prescribing. *International Journal of Homoeopathic Sciences*. 2021;5(3):224-30.
3. Cohen AS, Kim Y, Najolia GM. Psychiatric symptom versus neurocognitive correlates of diminished expressivity in schizophrenia and mood disorders. *Schizophrenia research*. 2013 May 1;146(1-3):249-53.
4. Martinez, C. C., & Cassol, M. (2015). Measurement of Voice Quality, Anxiety and Depression Symptoms After Speech Therapy. *Journal of Voice*, 29(4), 446–449. doi:10.1016/j.jvoice.2014.09.004
5. Wang J, Zhang L, Liu T, Pan W, Hu B, Zhu T. Acoustic differences between healthy and depressed people: a cross-situation study. *BMC psychiatry*. 2019 Dec;19:1-2.
6. Darby JK, Simmons N, Berger PA. Speech and voice parameters of depression: A pilot study. *Journal of Communication Disorders*. 1984 Apr 1;17(2):75-85.
7. Mookherjee A, Mulay P, Joshi R, Prajapati PS, Johari S, Prajapati SS. Sentlyser: Embedding Voice Markers in Homeopathy Treatments. In *Interdisciplinary Approaches to Information Systems and Software Engineering 2019* (pp. 181-206). IGI Global.
8. Menne F, Dörr F, Schröder J, Tröger J, Habel U, König A, Wagels L. The voice of depression: speech features as biomarkers for major depressive disorder. *BMC psychiatry*. 2024 Nov 12;24(1):794.
9. Wildgruber, D., Ackerman, H., & Grodd, W. (2001). Differential contributions of the motor cortex, basal ganglia, and cerebellum to speech motor control: Effects of syllable repetition rate evaluated by fMRI. *Neuroimage*, 13, 101–109
10. Cannizzaro, M., Harel, B., Reilly, N., Chappell, P., & Snyder, P. J. (2004). Voice acoustical measurement of the severity of major depression. *Brain and Cognition*, 56(1), 30–35.
11. Complete dynamics © Eduard van Grinsven version 21.11 browser edition, 2021 Oct 31
12. Oberai P, Balachandran I, Janardhanan Nair K, Sharma A, Singh V, Singh V, Nayak C. Homoeopathic management in depressive episodes: A prospective, unicentric, non-comparative, open-label observational study. *Indian Journal of Research in Homoeopathy*. 2013;7(3):116-25.
13. Pal S, Lakshmi S. An open label prospective clinical trial assessing the role of individualized homoeopathic medicine in management of adolescent depression. *Int J Hom Scien*. 2021;5(03):208-13.
14. Mohan GR, Prabhakar K, Murali T, Prasad PR. Evaluation of Homoeopathic Treatment Approach in Depressive Disorders of Hyderabad Urban Population of Age Group 15–30 Years: A Prospective, Non-comparative, Open-Label Observational Study. *Homoeopathic Links*. 2019 Dec;32(04):224-9.