

The Official Publication of the Canadian Academy of Audiology

## A Case for Motivational Interviewing in Hearing Care

Published May 7th, 2024

Bobbi-Jo J. Marlatt, M. Cl. Sc.

People living with hearing loss wait an average of 9 years to seek help for their hearing difficulties (Simpson et al., 2019). Without hearing aids there is a reduced ability to detect, identify and localize sounds as well as understand speech (Arlinger, 2003). This can create various communication challenges and reduce quality of life (Chia et al., 2007), foster social isolation (Ramage-Morin, 2016), increase depression (Li et al., 2014) and contribute to functional and/or cognitive impairments (Lin et al., 2013). Furthermore, untreated hearing loss can be a substantial burden for family and significant others (Scarinci et al., 2012). Despite evidence that amplification can improve quality of life (Arlinger, 2003; Willams et al, 2020) and slow cognitive decline (Lin et al, 2023) decisions in favour of obtaining hearing aids are delayed for years (Abrams & Kihm, 2015).

Currently, most hearing care professionals (HCP) promote hearing aid use through education and professional advice. Hearing aid (HA) adoption rates using the current methods are only 56% (Abrams & Kihm, 2015). This article will propose that HCP education and counselling practices would be wise to incorporate motivational interviewing (MI). Motivational interviewing (MI) is a counselling style that is proven to increase a patient's likelihood of making health-related behaviour changes (Rollnick et al., 2020). MI has been proven to outperform traditional advice giving in a many areas of health care (Rubak et al., 2005). MI builds intrinsic motivation and allows the HCP to conduct purposeful conversations about subjective factors to facilitate the decision process (Rollnick et al, 2020). To promote healthy aging and reduce years lived with untreated hearing loss it is crucial that the most effective counselling methods are being taught to and utilized by HCP.

#### **Intrinsic Motivation**

Self-determination theory (SDT) is a theory of motivation built on a set of assumptions about the nature of people and about the factors that give rise to action (Deci & Ryan, 1985). Deci and Ryan stated that health related behaviours are not just drive-based, nor are they a function of external controls (p.11). SDT predicts that increased internalized motivation accelerates the decision to make a positive health-related changes and helps maintain this behaviour (Deci & Ryan, 1985). Regarding treating hearing loss, SDT predicts that despite original referral source (family or physician pressure vs. self-referred) if there are high levels of intrinsic motivation the patient will opt to obtain hearing aids sooner. Ridgway et al. (2016) applied this interpretation of the SDT model to hearing aid (HA) purchase decisions. One year after initially seeking hearing help 125 hearing aid purchasers and 91 non-adopters completed questionnaires measuring autonomous motivation, autonomy support, and perceived competence for hearing aids. Autonomous motivation was associated with increased hearing aid purchases and positive fitting outcomes

(Ridgway et al., 2016). Thus, as predicted, the more intrinsic motivation the hearing-impaired patient has the more likely they are to get hearing aids and be satisfied with them. Subsequent research continues to support the value of using the SDT framework to understand hearing rehabilitation behaviours involving hearing aids (Ridgway et al., 2020).

### **Objective Factors and Subjective Reasoning**

Despite highly internalized motivation there may be other obstacles a patient must overcome before deciding in favour of hearing aids. Several studies have attempted to identify which variables are most crucial when deciding on HA (Dindamrongkul et al., 2022; Mckee et al., 2019). A recent literature review demonstrated that findings have been inconsistent across studies, geography, and context (Knoetze et al., 2023). For example, Dindamrongkul et al. (2022) found that in Thailand (n= 199) adults who used hearing aids were older than non-users, but gender, marital status, location, occupation, and hearing loss severity had no influence. Conversely, a study on American adults (n= 35,572) with self-reported HL supported that HA users were older but also more likely to be non-Hispanic, have higher education, and be wealthier (McKee et al., 2019). A review of 38 studies investigating over 150 variables believed to influence hearing aid uptake determined that there were no consistent findings (Knoetze et al., 2023). Three circumstances that showed the highest number of significant associations were objective measures of hearing loss (10 studies), communication difficulties (14 studies) and subjective reports of hearing difficulty (11 studies). Demographic variables (7), amount of insurance (4) and socioeconomic status (3) were significant variables in fewer studies. The authors noted that the inconsistency across studies could be explained by failing to control for the counselling methods used in each study and neglecting the competency of the clinician (Knoetze et al., 2023). For example, the counselling commonly used in Thailand could be systematically different than in the US, either way could be more effective at fostering hearing aid adoption in different populations. In some regions the clinicians may receive very little counselling training at all. Investigating 150 patient variables but not controlling for clinician behaviour exemplifies how hearing care continues to neglect the interplay between counselling behaviour and patient outcomes.

Understanding obstacles to hearing aid purchases is important to reduce systematic barriers to hearing aid access but they are not as useful at the HCP level. Clinicians can, however, support patients as they navigate subjective reasoning. In one study, qualitative data derived from thematic analysis of interviews revealed six themes of subjective reasoning that affected hearing aid decisions: social activities, disability perspective, social support, medical and personnel factors, rights and accessibility, and benefits of HA (Dindamrongkul et al., 2022). They found when subjective considerations support hearing aid purchases, this enabled the patients to decide in favour of hearing aids. Limited research was found on the importance of subjective reasoning within a Canadian context, the efficacy of various clinician counselling methods, and the relationship between objective factors and subjective reasoning.

# MI is Necessary

Motivational Interviewing (MI) is a counselling style that is proven to increase a patient's likelihood of making a health-related behaviour change (Rollnick et al., 2020) like deciding to wear hearing aids. A MI counselling style aims to increase intrinsic motivation in patients (Rollnick et al., 2020) which has been shown above to support positive decisions regarding hearing aid purchases (Ridgway et al., 2016). MI also uses specific strategies to enable the patient to

overcome subjective conflicts. Discussion about these subjective conflicts is commonly referred to as "change" and "sustain" talk in MI. For example, the participants who held social positions or frequently engaged in social activities gave these as a reason to use an HA (change talk) whereas those who preferred to stay at home expressed this as reason to abstain (sustain talk) from change (Dindamrongkul et al., 2022). MI is necessary in hearing care because it engages the patient in the process of assigning importance to these subjective factors until they are no longer paralyzed with indecision. It is also a very specific method with explicit steps and strategies that can be taught consistently to all HCP and for which clinician competency can be evaluated. Implementing reliable use of this evidence-based counselling method is essential to control for clinician variables in future studies allowing us to get a truer picture of the systematic barriers patients face.

### Implementing MI in Hearing Care

Motivational interviewing is conducted in 4 (not always linear) steps: 1) engaging the patient 2) evoking reasons for change 3) focusing on a direction 4) planning for change (Rollnick et al, 2020). Patients who list more reasons for change in step 2 tend to be in a more advanced stage of the Transtheoretical Model of Change (Prochaska & Velicer, 1997). The Transtheoretical Model of Change (TMC) is a five-stage circular model of help-seeking behaviour. TCM allows clinicians to gage a patient's readiness to make a health behaviour change and recommends how best to advance each patient. The TCM stages are (starting with least eager to change); precontemplation, contemplation, preparation, action, and maintenance. The more advanced the stage of change, the more increased internal motivation the patient has and the TCM forecasts that the MI step 3 (focusing) and 4 (planning) will be most beneficial. For patients in a less advanced stage of change (less internalized motivation) the TCM shows that MI step 1 (engaging) and 2 (evoking) are essential. Therefore, identification of the TCM stages is crucial for the HCP to implement MI counselling accordingly and if the TCM can be mapped successfully onto hearing care this would further support the integration of MI into our regular practice.

Fortunately, Saunders et. al. (2016) found that the help seeking behaviour of patients with hearing loss can be described successfully with the TCM. Adult participants (n=182) completed the University of Rhode Island Change Assessment (URICA), Hearing Handicap Inventory (HHI), and Psychosocial Impact of Hearing Loss (PIHL). They found that 77% of first-time help seekers who come to the clinic in person were in the action stage, whereas those seeking online screenings were more likely to be contemplative. Similarly, those referred by doctors were more contemplative than self-referred individuals. Also, individuals with greater hearing impairment and of increased duration were in more advanced TCM stages (Saunders et al., 2016).

These findings predict that the MI steps 3 and 4 (focusing and planning) are vital for self-referred, in-person appointments for individuals with a greater hearing loss. This also predicts that MI step 1 and 2 (engaging and evoking) would be most successful via websites/tele-health, or for patients referred by doctors and/or those with a mild hearing loss. To test the second prediction, Heffernan et al. (2023) investigated whether using the Ida Institute's questionnaire "Why Improve My Hearing?" (WIMH) influences the patient's readiness for HA. The WIMH is an MI tool that focuses on engaging (step 1) the patient and evoking reasons for change (step 2). It does this by asking the patient to select an image that represents a specific listening situation where they experience hearing difficulty. It then asks them to rate how important it is to improve their hearing on a scale from 1-10 (very important) and to explain their answer. The Tool ends with "What will happen if you continue as you are today?" and "What would happen if you got a hearing aid to improve your hearing right now?" both of which are meant to get the patient considering the

potential consequences of refraining from hearing aids. The participants chosen were individuals referred for a hearing test by their physician (extrinsic catalyst). The WIMH was completed online before the initial hearing appointment and then discussed at the assessment. About 12 weeks after the appointment, 10 patients and 5 audiologists were selected using a maximum variation sampling strategy to participate in semi-structured interviews. The responses were analysed using thematic analysis. The WIMH was described as helping the patient understand and accept their hearing loss as well as increasing their intrinsic motivation, feelings of "readiness", and involvement in decision-making at the appointment (Heffernan et al., 2023). Those who were most contemplative reported the most benefit from this tool which supports that use of MI tools in hearing care aligns with the predictions made by SDT theory and the TCM framework above.

### **MI in Other Disciplines**

The struggle to promote health behaviour change is not unique to hearing care. Encouraging healthy behaviour occurs in every area of health care, like quitting smoking, getting more exercise, or adhering to medication regimes (Rollnick et al., 2020). Many health care workers find their patients unmotivated to change, and the well-meaning clinicians advise them to change anyway. This directing style often leads to defiance or passivity (Rollnick et al., 2020) and can attribute to compassion fatigue in clinicians. Alternatively, MI is a patient-led approach. A systematic review of 72 studies found MI outperformed traditional advice 80% of the time (Rollnick et al., 2020). For example, MI was found to be more effective than education and advice for weight loss (Mirkarimi et al., 2017) and quitting smoking (Soria et al., 2006). Furthermore, using an MI approach can improve the clinician-patient relationship (Kropf & Cummings, 2017). Even brief 10-minute conversations based on MI principles coupled with print materials are more effective than traditional methods (Hanson et al., 2012).

However, there are some practical considerations for integration of MI into HCP practice. In the Netherlands, MI is already a mandatory component of health care education (Boom et al., 2022). General Practitioners (GPs) and Practice Nurses (PNs) are taught to use MI to increase positive patient behaviour regarding management of chronic diseases. Despite mandatory MI training, implementation varies. In a qualitative study, Boom et al. (2022), identified several factors impeding MI implementation in daily practice. Two hundred GPs and PNs completed open-ended questionnaires and semi-structured interviews and the "Video Assessment of Simulated Encounters -(Mental) Health Care" (VASE-(M)HC) was used to assess their MI competency. Notably, all participants acknowledged MI's effectiveness and claimed it had a positive impact on their job satisfaction. However, many reported challenges integrating MI into their daily routine and organizational procedures. Factors influencing MI implementation were categorized into 3 main areas: setting (amount of time), individual factors (self-efficacy), and patient factors (age and cognition).

Applying this to hearing care, HCP would need to be able and willing to lengthen the amount of appointment time allotted to counselling. Perceivably most would feel compelled to accommodate a 10-minute MI conversation if it could cut years of living with an untreated hearing loss out of the equation. Furthermore, given what MI's potential to increase the patient's subsequent satisfaction with the aids and build a better clinician-patient relationship, a few extra minutes at the initial appointment could mean less follow-ups, increased HA wear time and positive business reviews.

#### Conclusion

In summary, individuals with hearing loss can spend many years deciding whether to acquire hearing aids. Traditional counselling methods employed by hearing care professionals struggle to expedite this decision-making process through education and advice alone. Self-Determination Theory elucidates that patients with greater internal motivation are more inclined to pursue hearing aids (Ridgway et al., 2016). This underscores the value of MI because it is technique that builds motivation by engaging patients and eliciting their reasons for change. MI assists patients in resolving ambivalence, ensuring that subjective factors positively influence their decision-making (Dindamrongkul et al., 2022). By aligning the Transtheoretical Model of Change with the help-seeking behaviour of hearing-impaired individuals, the HCP can pinpoint where and when the four steps of MI can be effectively applied (Saunders et al., 2016). For example, implementing evoking tools prior to the initial appointment could abbreviate the time spent deliberating on hearing aid acquisition (Heffernan et al., 2023). These findings stress the necessity for hearing care professionals to be equipped with MI skills as part of their education. Furthermore, such education should be accompanied by efforts to eliminate systematic barriers to MI implementation in daily practice (Boom et al., 2022).

The evidence presented here is compelling, nonetheless peer-reviewed research in a Canadian context is imperative to evaluate whether MI-trained HCPs successfully reduce the duration of untreated hearing loss for their patients when compared to those lacking MI training. Additionally, there is an absence of educational materials for Canadian HCP students as well as tools to assess proficiency in MI specific to hearing care counselling. Regarding already practicing HCP clinicians, it is essential to explore their receptiveness to adopting this new methodology and determine optimal delivery methods for MI training outside of a traditional classroom. Lastly, establishing MI as best practice requires ongoing maintenance and evaluation of MI skills, therefore cooperation from governing bodies and associations will be required to help sustain the integrity of this approach.

#### References

- 1. Arlinger, S. (2003). Negative consequences of uncorrected hearing loss-a review. *International Journal of Audiology*, 42(2), 2S17–2S20.
- 2. Boom, S. M., Oberink, R., Zonneveld, A. J. E., van Dijk, N., & Visser, M. R. M. (2022). Implementation of motivational interviewing in the general practice setting: a qualitative study. *BMC Primary Care*, 23(1), 21. https://doi.org/10.1186/s12875-022-01623-z
- 3. Chia E. M., Wang J. J., Rochtchina E., Cumming R. R., Newall P., Mitchell P. (2007). Hearing impairment and health-related quality of life: The blue mountains hearing study. *Ear and Hearing*, 28(2), 187–195. https://doi.org/10.1097/AUD.0b013e31803126b6
- 4. Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Publishing Co. https://doi.org/10.1007/978-1-4899-2271-7
- 5. Deci E., Ryan R. (2000). The what and why of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiries*, *11*, 227–268. https://doi.org/10.1207/S15327965PLI1104\_01

- 6. Dindamrongkul, R., Riewpaiboon, W., Yimtae, K., Krityakiarana, W., & Niyomphol, W. (2022). Factors influencing making a choice and accessing a hearing aid among elders with hearing disability: Mixed methods. *International Journal of Human Rights in Healthcare*, *16*(5), 454–472. https://doi.org/10.1108/IJHRH-04-2022-0028
- Heffernan, E., Maidment, D. W., & Ferguson, M. A. (2023). A qualitative study showing that a
  telecare tool can have benefits before and during the initial hearing assessment appointment. *International Journal of Audiology*, 62(4), 295–303.

  https://doi.org/10.1080/14992027.2022.2041740
- 8. Knoetze, M., Manchaiah, V., Mothemela, B., & Swanepoel, D.W. (2023). Factors influencing hearing help-seeking and hearing aid uptake in adults: A systematic review of the past decade. *Trends in Hearing*. 27, 1-24. doi:10.1177/23312165231157255
- Kropf, N. P., & Cummings, S.M. (2017). Motivational interviewing: Evidence-based practice. Evidence-based treatment and practice with older adults: Theory, practice, and research, evidence-based practices (pp.151-172). New York, online ed. Oxford Academic. https://doi.org/10.1093/acprof:oso/9780190214623.003.0008
- Li, C.M., Zhang X., Hoffman H.J., Cotch M.F., Themann C.L., & Wilson M.R. (2014). Hearing impairment associated with depression in US adults- National health and nutrition examination survey 2005-2010. *JAMA Otolaryngology Head Neck Surgery*, 140(4), 293-302. doi:10.1001/jamaoto.2014.42
- 11. Lin, F. R., Pike, J. R., Albert, M. S., Arnold, M., Burgard, S., Chisolm, T., Couper, D., Deal, J. A., Goman, A. M., Glynn, N. W., Gmelin, T., Gravens-Mueller, L., Hayden, K. M., Huang, A. R., Knopman, D., Mitchell, C. M., Mosley, T., Pankow, J. S., Reed, N. S., ... Coresh, J. (2023). Hearing intervention versus health education control to reduce cognitive decline in older adults with hearing loss in the USA (ACHIEVE): A multicentre, randomised controlled trial. *The Lancet*, 402(10404), 786–797. https://doi.org/10.1016/S0140-6736(23)01406-X
- 12. Lin, F. R., Yaffe, K., Xia, J., Xue, Q. L., Harris, T. B., Purchase-Helzner, E., Satterfield, S., Ayonayon, H. N., Ferrucci, L., Simonsick, E. M., & Health ABC Study Group (2013). Hearing loss and cognitive decline in older adults. *JAMA internal medicine*, 173(4), 293–299. https://doi.org/10.1001/jamainternmed.2013.1868
- 13. McKee, M. M., Choi, H., Wilson, S., DeJonckheere, M. J., Zazove, P., Levy, H. (2019). Determinants of hearing aid use among older Americans with hearing loss. *The Gerontologist* (59)6, 1171–1181, https://doi.org/10.1093/geront/gny051
- 14. Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion: AJHP*, 12(1), 38–48. https://doi.org/10.4278/0890-1171-12.1.38
- 15. Ramage-Morin P. L. (2016). Hearing difficulties and feelings of social isolation among Canadians aged 45 or older. *Health Reports*, 27(11), 3–12. PubMed
- 16. Rollnick, S., Butler, C. C., Kinnersley, P., Gregory, J., & Mash, B. (2010). Motivational interviewing. *BMJ : British Medical Journal (Online)*, *340*. https://doi-org.libproxy.wlu.ca/10.1136/bmj.c1900
- 17. Ridgway, J., Hickson, L., & Lind, C. (2016). Decision-making and outcomes of hearing help-seekers: A self-determination theory perspective. *International Journal of Audiology*, 55 (3),

- 18. Ridgway, J., Lind, C., & Hickson, L. (2020). What Motivates People to Seek Help for Their Hearing? Applying Self-Determination Theory to Hearing Healthcare. In B. Ng & G. Ho (Eds.), *Self-Determination Theory and Healthy Aging: Comparative Contexts on Physical and Mental Well-Being* (pp. 147–169). Springer. https://doi.org/10.1007/978-981-15-6968-5\_8
- 19. Rubak, S., Sandbaek, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. *The British Journal of General Practice: The Journal of the Royal College of General Practitioners*, 55(513), 305–312.
- 20. Ryan R.M., Patrick H., Deci E.L., & Williams G.C. (2008). Facilitating health behavior change and its maintenance: Interventions based on self-determination theory. *European Health Psycholologist*, 10, 2–5.
- 21. Saunders, G. H., Frederick, M. T., Silverman, S. C., Nielsen, C., & Laplante-Lévesque, A. (2016). Description of adults seeking hearing help for the first time according to two health behaviour change approaches: Transtheoretical model (stages of change) and health belief model. *Ear and Hearing*, *37*(3), 324–333. https://doi.org/10.1097/aud.000000000000000268
- 22. Simpson, A. N., Matthews, L. J., Cassarly, C., & Dubno, J. R. (2019). Time From Hearing Aid Candidacy to Hearing Aid Adoption: A Longitudinal Cohort Study. *Ear and Hearing*, 40(3), 468–476. https://doi-org.libproxy.wlu.ca/10.1097/AUD.00000000000000641
- 23. Williams, N., Guthrie, D. M., Davidson, J. G., Fisher, K., & Griffith, L. E. (2020). A deterioration in hearing is associated with functional and cognitive impairments, difficulty with communication, and greater health instability. *Journal of Applied Gerontology*, *39*(2), 159–171. https://doi.org/10.1177/0733464818755312