Konzepte und Evidenz zu Interprofessionalität in der Behandlung von Aphasien

DE | Zusammenfassung

In den letzten Jahren hat der Begriff der «Interprofessionalität» im medizinischen Kontext stark an Bedeutung gewonnen. Die Zahl an Studien und Artikeln, welche «Interprofessionalität» in verschiedenen Bereichen des Gesundheitswesens erwähnen und untersuchen, nimmt stetig zu. Neben interprofessioneller Zusammenarbeit rückt auch die interprofessionelle Ausbildung zunehmend in den Fokus. Trotz solider Unterstützung des Konzeptes der interprofessionellen Zusammenarbeit und Ausbildung durch WissenschaftlerInnen und AkteurInnen im medizinischen Bereich fehlt es an Evidenzen, welche messbare Vorteile dieses Konzeptes aufzeigen können. Dieser Mangel an Evidenzen zeigt sich insbesondere in sehr spezifizierten Feldern wie im Aphasie-Management. Dieser Artikel zielt darauf ab, eine Übersicht über Definitionen und aktuelle Konzepte zur interprofessionellen Zusammenarbeit und Ausbildung zu generieren. Weiter werden aktuelle Evidenzen und Beispiele aus dem praktischen Feld vorgestellt und zu erwartende Vorteile erörtert. Zuletzt werden Konklusionen für das interprofessionelle Aphasie-Management diskutiert.

Schlüsselwörter: Interprofessionalität, interprofessionelle Zusammenarbeit, interprofessionelle Ausbildung, Aphasie

1. Introduction

Due to progress in health knowledge and the ability to treat more complex diseases simultaneously, the involvement of new health care professions leads to new challenges in coordination (Roodbol, 2012). Not only has the number of published papers referring to collaborative practice and interprofessional education increased (Bundesamt für Gesundheit (BAG), 2017; Okamura et al., 2019; Van Noorden, 2015) but also major associations and organizations have started to actively support this concept. They even claimed its integration in daily health care by frameworks irrespectively of the diagnosis (BAG, 2017; Haddara & Lingard, 2013; Lützenkirchen, 2005; Okamura et al., 2019; Raymer et al., 2018; World Health Organization (WHO), 2010) as well as in professional descriptions such as speech and language therapy (American Speech-Language-Hearing Association (ASHA), 2022a; ASHA, 2022d; Schweizer Hochschule für Logopädie (SHLR), 2022).

The ASHA revised their scope of practice for speech and language pathologists due to the upcoming demand of interprofessionality in speech and language therapy in 2016 (ASHA, 2016). It is strongly recommended to collaborate intensively with other professions in order to achieve the best outcome for persons with aphasia (PWA) (ASHA, 2022a).

Even though the interest and the increased demand of interprofessionality have been growing rapidly (Okamura et al., 2019; Plattform Interprofessionalität, 2021; Roodbol, 2012), determining a precise definition of interprofessional education and especially collaborative practice seems to be challenging (Gerber & Rüefli, 2021; Ndibu et al., 2020). Gerber et al. (2018) criticize that this concept is benefitting from much support, however, its definition is hardly concrete.

Apparently, the most cited definition of collaborative practice and interprofessional education has been the World Health Organization's (WHO) definition (BAG, 2017; Gerber et al., 2018; Gerber & Rüefli, 2021; SAMW, 2014; Sottas, 2016):

*<<**Collaborative practice** happens when multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care>> (WHO, 2010, page 7)*

*<<**Interprofessional education** occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes>>* (WHO, 2010, page 7).

The following discussion of this topic relies on the definitions above.

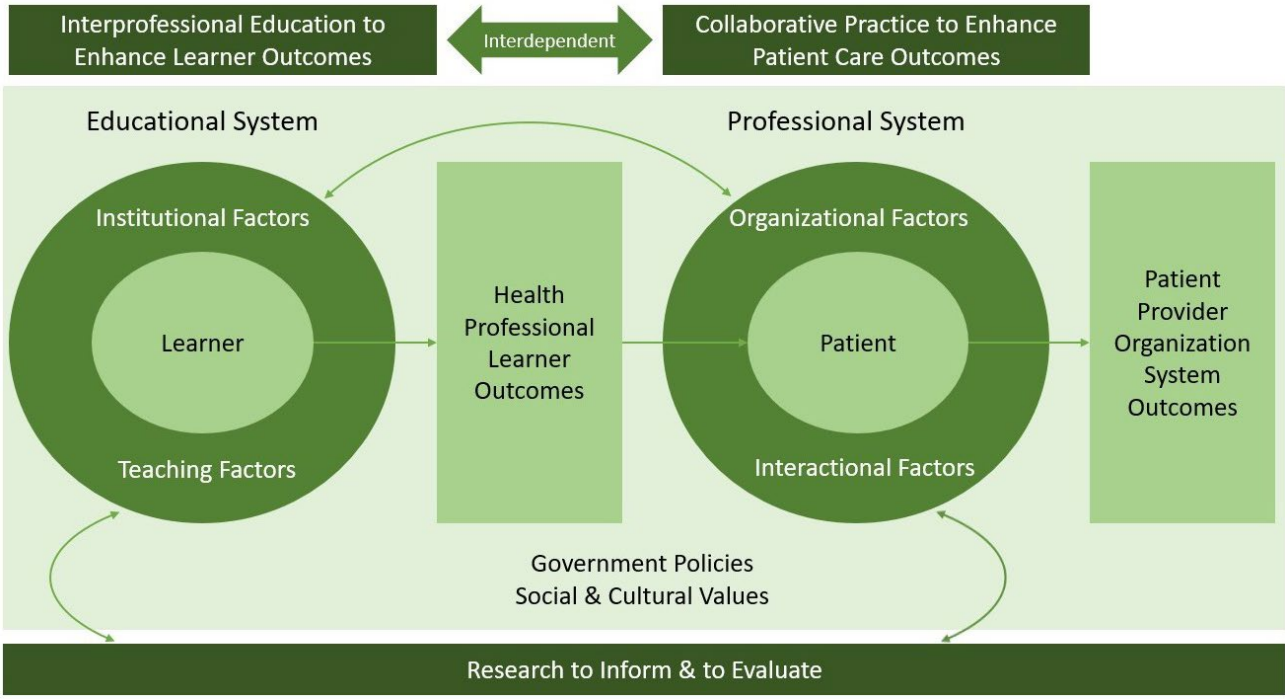

Figure 1: Interprofessional education for collaborative patient-centered practice (IECPCP) (simplified) According to D'Amour et al. 2005, page 11.

2. Concepts and forms depending on settings

One concept which includes both interprofessional education and collaborative practice is the "Interprofessional Education for Collaborative patient-centered Practice" (IECPCP) (D'Amour et al., 2005; see figure 1).

This concept aims to show different systems in which interprofessionality in health care can be applied in order to generate the best outcome for patients but also considering the efficiency of high standard treatments (D'Amour et al., 2005).

The learner, as the center of the first circle representing the educational system, is influenced by the institution and its teachers during his or her education. Attitudes towards other professions and beliefs of the own profession play an important role at this stage. Moreover, through interactions between learners from different disciplines, they have the chance to learn about each other's profession as well as with each other (D'Amour et al., 2005). Subsequently, this early-stage interaction between disciplines, joint learning, respect, and knowledge of other disciplines influence learners' outcomes by the time of graduation (ASHA, 2022b; ASHA, 2022c; D'Amour et al., 2005; Roodbol, 2012; Sottas et al., 2016). Sottas et al. (2016) show best practice examples in their review and a prototype of a possible curriculum. However, this process of interprofessional learning and collaboration does not stop after graduation. Health care professionals are bound to stay open and attend further trainings (Vallumrod et al., 2016).

Hence the patient, as the center of the second circle representing the professional system, is influenced by the organizational and interactional factors such as internal guidelines, shared goals, and visions as well as the coordination of treatments. All those factors affect the patient's outcome (D'Amour et al., 2005).

Ideally, the professional and the educational system interact since they mutually benefit in an interdependent way. Learnings and experiences from the professional systems should be transferred to the educational system which in turn provides the professional system with skilled specialists (D'Amour et al., 2005). Each system is embedded in a superordinate system of government policies as well as social and culture values which provide guidelines (D'Amour et al. 2005).

Lastly, in order to achieve the best outcome for learners as well as for patients and the organization, continuous research is needed investigating different tools and concepts regarding specific diagnosis, settings and outcomes (ASHA, 2022d; D'Amour et al., 2005; Gleed et al., 2016).

Evidently, research that considers various disciplines requires skilled reviewers with an interprofessional background for publication to guarantee a high standard. In fact, this illustrates one of the challenges in interprofessional research (Gleed et al., 2016).

In comparison to the IECPCP framework described above Jehle & Steiner (2021) specifically focus on the professional system and elaborate three different forms of collaboration:

- Coordinative aggregation: the medical discipline is in lead. The collaboration is characterized by collecting the best possible information out of every discipline. The disciplines work next to each other but less with each other. This form is often seen in stroke units.
- Co-creative aggregation: flat hierarchy, patient-centered approach. Disciplines are working with each other and follow shared goals. This form is often seen in neurological rehabilitation with inpatient clinics.
- Project-based aggregation: flat hierarchy, patient-centered approach. Overall similar to the co-creative aggregation but with lower intensity. This form is often seen in outpatient settings.

Jehle & Steiner (2021) underpin the premise that the concept varies depending on the setting. Similarly, Sottas et al. (2016) analyze these different settings to draw a conclusion which setting fits best for interprofessional education. In order to prepare students in health care professions with high skills in collaborative practice, training during their education is necessary (Sottas et al., 2016; WHO, 2010). According to the analysis of Sottas et al. (2016) settings and institutions with chronic and multimorbid patients, less structured authorities and a less urgent environment turn out to be very suitable places to gain these skills in collaborative practice.

3. Requirements to successful interprofessionality

Even though interprofessionality seems to be supported by various players in the practical field, politics and occupational unions (BAG, 2017; Gabrielova & Veleminsky, 2014; Gagliardi et al., 2011; Roodbol, 2012; WHO, 2010), the concept needs guidelines and requirements that should be complied (BAG 2017; Gerber et al., 2018; Jehle & Steiner, 2021; Roodbol, 2012; Schweizerische Akademie der Medizinischen Wissenschaften (SAMW), 2014; SAMW,

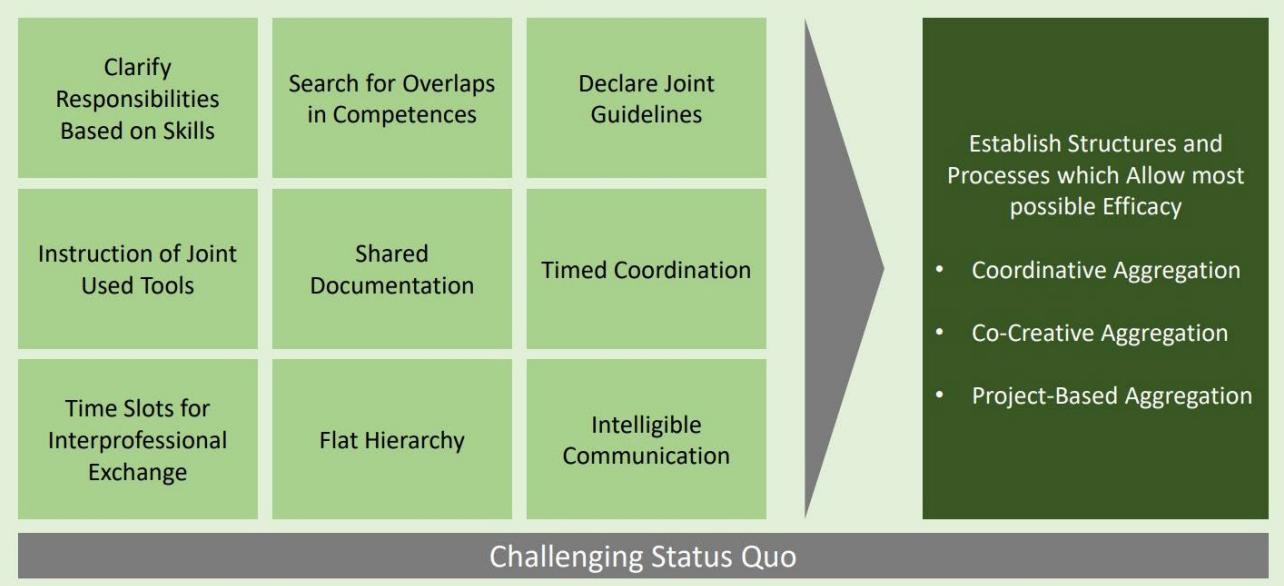

Figure 2: Succeeding factors in interprofessional collaboration. Own chart based on explanations in Jehle & Steiner (2021)

2017). Evidently, announcing to work and educate interprofessionally alone does not improve any outcomes neither for patients nor for learners or organizations (Gerber et al., 2018).
Jehle & Steiner (2021) establish nine factors (bright green) that contribute to a successful collaborative practice considering high efficiency in different settings (dark green).

There is a strong consensus for succeeding factors among researchers and stakeholders:

BAG (2017) and Jehle & Steiner (2021) state that the concept of collaborative practice needs to be adapted for different settings (acute care vs. outpatient clinic) and responsibilities need to be shared and distinctly allocated. Furthermore, strong communication skills within the team but also with patients and their relatives are required which allow to coordinate treatment plans well and in order to convey information appropriately. These factors get underpinned by practitioners in Switzerland according to Gerber et al. (2021).

D'Amour et al. (2005) and SAMW (2014, 2017) state that willingness of all the involved professions, organizations and the politics is an essential factor to build guidelines in the first place.

As for guidelines on governmental level a new rate system "ST Reha 1.0" has been established in Switzerland in January 2022 inpatient rehabilitation (Bundesamt für Statistik (BFS), 2021; Meyer, 2018; SwissDRG AG, 2021a). Aside from the financial objective, ST Reha 1.0 defines a minimum of requirements of inpatient rehabilitation services considering the patient's diagnosis and its severity. Mandatory numbers of professionals and hours included are described (Meyer, 2018; BFS, 2021) involving among others speech and language therapists (BFS, 2021). By implementing ST Reha 1.0 a scope of action on governmental level has been provided. Wägli (2022) concludes that challenging the status quo is the next step to allow a flexible application of the concept in order to provide patients with reasonable interprofessional rehabilitation services. That being said, the implementation of the revision, ST Reha 2.0, is projected for 2024 (SwissDRG, 2021b).

As for speech and language therapists ASHA states that shared values and mutual respect are indispensable requirements to communicate and make shared decisions successfully and in the best interest of the patient (ASHA, 2022d). In order to share responsibilities and determine case managers, health care professionals including speech and language therapists need to be aware of their own knowledge and skills (ASHA, 2022d; Koloff & Schmitz, 2021; Gabrielova et al., 2014; Ndibu, 2020). In addition, important terminologies should be defined to avoid any misunderstandings or contradictory use (Hellmann, 2021).

With an increasing number of different health care professions (Roodbol, 2012) speech and language therapists should establish themselves within their institutions and collaborative partners including presenting their domains. In doing so, potential collaborative partners recognize benefits in a collaboration in the first place (Lüscher et al., 2020).

However, working successfully in an interprofessional context presumes appropriate training during education. Thus, interprofessional competence of teamwork should be well established during education (D'Amour et al., 2005; Gerber et al 2021).

In support of all the factors mentioned above Mulvale et al. (2016) emphasize how important shared goals and documentation systems are. However, besides organizational factors another significant factor seems to be that the members of the interprofessional team believe in the concept and feel part of the team (Mulvale et al., 2016; Ndibu et al., 2020).

Most importantly, collaborative practice needs to stay flexible and adaptable for various settings, patients, and situations. Once a concept has been established, adjusting it is the next step that should be an ongoing process to achieve the best possible health care service (SAMW 2017). Jehle & Steiner (2021) support continuous challenging of the status quo and Malvale et al. (2016) even suggest recurrent internal audits to identify potential improvement.

Meier et al. (2019) identified through a survey-based research that medical speech and language therapists in Switzerland especially complain about no time resources for interprofessional collaboration and its establishment within an institution. More support of the professional association and the institution itself is claimed. Besides those challenges, great progress was reported concerning shared patient documentation and shared decision making (Meier et al., 2019).

4. Benefits of interprofessionality

Great benefits for patient's outcomes as well as for present and future challenges in health care are possible by applying collaborative practice and interprofessional education (Roodbol, 2012; Vallumrod et al., 2016; WHO, 2010;):
<<The World Health organization (WHO) and its partners recognize interprofessional collaboration in education and practice as an innovative strategy that will play an important role in mitigating the global health workforce crisis.>> (WHO, 2010, page 7).

This statement is supported by ASHA who worked out the details of the benefits: better outcomes for patients, increase of efficiency, cost-saving, mitigating of treatment interruptions, less error-prone, fairer for low-income people (ASHA 2022c).

Moreover, collaborative practice can help to prevent health care supply (BAG, 2017; SAMW, 2014; WHO, 2010). BAG (2017) concludes that collaborative practice can increase efficacy and quality of treatment. There are trends that show an increase of satisfaction in health care providers, less premature transitions into other professions and therefore a great benefit against skills shortage (BAG, 2017).

Plattform Interprofessionalität (2021) adds that especially for people living in rural areas good collaborative practice and patient-centered care can bring a great improvement in health care providing and its access. To achieve this benefit all involved stakeholders need to unite and elaborate a specific framework for the corresponding region. Furthermore, pilot projects should be supported financially to evaluate those frameworks.

Raymer et al. (2018) describe collaborative practice as a main principle in the rehabilitation of aphasia in regard to the best possible outcome of language skills and social interaction which on the other hand has a great impact on a person's quality of life.

5. Current evidence of interprofessionality

Great benefits for collaborative practice and education are discussed in the literature but finding evidence for these benefits appears to be a challenge.

5.1 Interprofessionality in general

Gerber et al. (2018) indicate that to date, there is hardly any evidence that interprofessional collaboration reduces mortality or length of stay in the hospital. Trends show that the number of complications could be slightly reduced. Moreover, Mulvale et al. (2016) state in their systematic review that there are hardly any studies that examine specific concepts of collaborative practice. Nevertheless, it is discussed that there is rather a deficit in research resulting in a lack of evidence rather than the concept of collaborative practice being useless.

Reeves et al. (2017) reviewed nine randomized control trials investigating the effect of collaborative practice on health outcomes. The authors summarize that all those studies represent low level evidence and that therefore, no guidelines for collaborative practice can be derived. Moreover, specific effects of collaborative practice on health outcomes could not be identified.

In contrast, Sottas et al. (2015) infer based on their review that there is reliable evidence as for a more effective health care service, patient-centered care, more satisfied

health care providers as well as more acceptance of treatment plans on part of the patients when collaborative practice is applied. Moderate evidence could be detected in better accessibility to health care and efficiency regarding costs. Low evidence was found in higher patient security, higher motivation in health care providers and boosting of lifelong learning. Evidence levels were determined based on the quality of the studies found.

5.2 Interprofessionality in aphasia management

Research is presented considering interprofessionality in aphasia in the professional system and secondly in the educational system. Unfortunately, no studies can be found investigating the effect of interprofessional education in aphasia.

As for the chronic phase in mild aphasia Möller et al. (2021) surveyed quality of life in PWA in an interdisciplinary living group which included a three-month program with weekly sessions each for three hours guided by students majoring in psychology, occupational therapy and speech and language pathology. Content wise they focused on storytelling of important happenings of the week and joint interdisciplinary activities chosen by the participants. Quality of life tends to increase irrespective of the severity of the aphasia or activities of daily living. Unfortunately, there was only a post survey. Therefore, results are limited in interpretation and no significance could be applied.

Attard et al. (2017, 2020) aimed to determine the efficacy of an interprofessional group approach in PWA in a chronic phase and their spouses. The intervention included a twelve-week group program, two hours a week conducted by a speech and language pathologist and a social worker. Content wise it focused on specific training and activities with PWA on one hand and on mixed sessions with spouses focusing on meaningful activities and psychological support on the other hand. As a result, Attard et al. (2017, 2020) did not detect any significant changes for the spouses but some in PWA.

Considering carers and relatives as part of the interprofessional team and according to ICF (WHO, 2021) Purdy (2005) examined a group intervention with ten PWA and their partners during a twelve-week program with weekly sessions each one to two hours long. Communication skills were observed and trained, education about aphasia and communication was conveyed. Most of the PWA as well as the partners reported improved and more successful communication and more positive feelings when communicating with each other. The findings showed no significance.

Lately, Rasmus & Orlowska (2020) published a similar study but with higher level evidence due to a higher number of participants and compared outcomes to a control group. Significant findings suggest a better quality of marriage after ten sessions each ninety minutes long with similar contents as in Purdy (2005). The sessions were conducted by a speech and language pathologist as well as a family therapist.

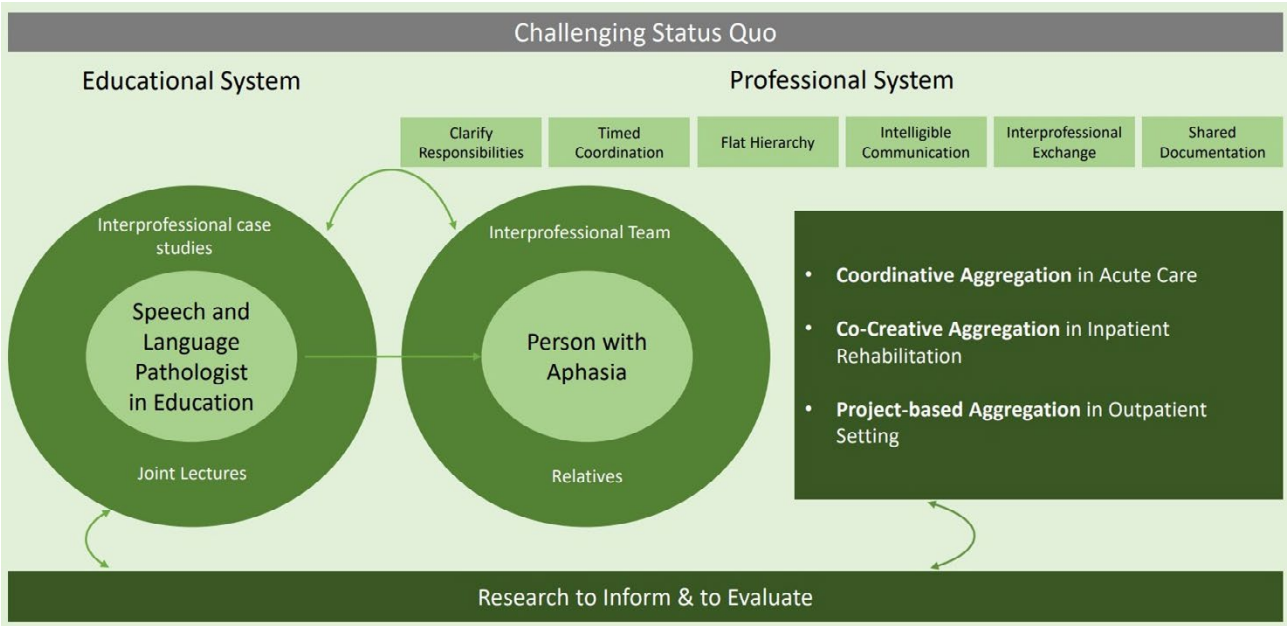

Figure 3: Own model according to D'Amour et al. (2005), page 11; Jehle & Steiner (2021)

6. Applied interprofessionality in aphasia management

Applying one of the most comprehensive concepts for the IECPCP by D'Amour et al. (2005) on the management of aphasia including the described succeeding factors and forms of collaborative practice, Figure 3 can give an overview on a comprehensive model of aphasia management considering interprofessional education as well as collaboration. This model and its explanations are the author's proposal based on the research presented above.

Subsequently, during education speech and language pathologists will have joint lectures and case studies with students from other disciplines with similar education level. Therefore, professionals would bring a brighter knowledge about other disciplines to their daily work with PWA. Students in the field of occupational therapy, psychology as well as medicine seem to have the widest overlaps.

Within the professional system professions from different disciplines should work together to achieve the best outcome for the patient. The collaborative practice stands out through integrating different disciplines, the patient as well as the relatives and considering succeeding factors such as clarifying responsibilities and shared documentation (light green boxes). The interdisciplinary team is educated about aphasia and appropriate communication with PWA to provide the best possible information accessibility for the PWA. The settings determine the form of collaboration (dark green boxes). As discussed above many different professionals can be involved and benefit the aphasia management depending on the setting, the needs, and the availability.

Table 1 gives an example which professions could be involved in interprofessional aphasia management:

Overall, findings through research and a continuous challenging of the status quo ensure quality of care and flexibility. Preferably, research in aphasia becomes more interdisciplinary reflecting the collaborative practice and interprofessional education also in science.

7. Conclusion

The literature clearly shows that the concept of interprofessionality in practice as well as in education is widely supported by various stakeholders and that the interest is increasing. Not only changes are occurring in the professional system but also on governmental level. Nevertheless, one of the most significant deficits whether in general or specifically in aphasia is the lack of evidence. Further research is needed to better understand which concepts are most suitable for specific settings (BAG, 2017; D'Amour et al., 2005; Gagliardi et al., 2011; Gerber et al., 2018; Mulvale et al., 2016; Reeves et al., 2017). Additionally, studies are yet missing investigation cost and benefit ratio (Gerber et al., 2018) as well as measurement of quality of the studies itself in order to generate higher level evidence (Okamura et al. 2019). Besides, other outcome measurements need to be addressed since mortality, length of stay etc. seem to be challenging to measure in collaborative practice and interprofessional education (Pannick et al., 2015).

Table 1: Collaborative practice in aphasia management

Professions	Collaboration	Sources
neurologists, radiologists, speech and language therapists	differential diagnostics in Alzheimer Disease, primary progressive aphasia and aphasia through positron emission tomography (PET) and computed tomography (CT) scan	Gyorfi & Gabor, 2015 Shigaeff et al., 2017
psychologists and speech and language therapists	20% prevalence of depression in PWA, family counseling, counseling of PWA	Ashaie et al., 2019 Laures-Gore et al. 2020 Baker et al., 2018
information technologists and speech and language therapists	digitalization processes within institution, clinic information systems including speech tests and shared documentation, development of specific applications for aphasia therapy	Gyorfi & Gabor, 2015
occupational therapists and speech and language therapists	linking language in different modalities as well as cognitive and motor functions in group projects	Rilling et al., 2010
psychologists, musician instructors/ therapists and speech and language therapists	feeling part of a group with people who have the same difficulties, working on a music piece accompanied by professionals	Tarrant et al. (2016) Tamplin et al. (2013)

Regarding aphasia, further research in the specific field of aphasia and collaborative practice is claimed considering the ICF framework (Threats, 2010) as well as the development of valid and reliable assessment tools that can be conducted by different health care providers (Vallumrod et al., 2016). Attard et al. (2017, 2020) claim to support further research especially in order to determine what best supports the families.

However, various examples in the field can inspire and give ideas on how applied interprofessional education and collaborative practice can look like in aphasia management. Moreover, a great number of succeeding factors rely on individuals and small teams. Guidelines might not inevitably be applied in top-down frameworks but also in a bottom-up development. The professional and educational system does not necessarily have to wait with implementing interprofessional concepts until future research has provided high level evidence for each specific setting. Practical experience and challenging status quo can deliver valuable findings which can support the development of reasonable guidelines.

Kontakt | Sarah Ackermann, Kantonsspital Winterthur, Brauerstrasse 15, 8401 Winterthur, Schweiz; sarah.ackermann@hotmail.com

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