Medizinische Fakultät der Martin-Luther-Universität Halle-Wittenberg

Patient*innen im Übergang von der stationären psychiatrischen Versorgung in das häusliche Umfeld: Beurteilung und Anwendbarkeit von begleitenden Interventionen für Patient*innen im Übergangsprozess

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Die Schnittstelle zwischen stationärem und ambulantem Sektor ist gekennzeichnet von Versorgungsbrüchen. Der Übergang aus der stationären psychiatrischen Versorgung in das häusliche Umfeld stellt daher für viele Patient*innen einen besonders kritischen Zeitraum dar. Um die Inklusion von Patient*innen in das häusliche Umfeld zu erleichtern, erscheint deren Unterstützung über den stationären Aufenthalt hinaus wichtig. Dies kann unter anderem mithilfe von Interventionen mit einer Kombination von Komponenten vor und nach der Entlassung (Übergangs-Interventionen) aber auch Maßnahmen, die primär auf die Stärkung der Kompetenzen von Betroffenen abzielen, geschehen. Ziel dieser Arbeit war die Beurteilung der Zusammenhänge und der Anwendbarkeit von Interventionen zur Verbesserung des Übergangs von Patient*innen aus der stationären psychiatrischen Versorgung in das häusliche Umfeld.

Zur Bearbeitung des Themas wurden 3 Studien durchgeführt: 1) eine quasi-experimentelle Pilotstudie zur Anwendbarkeit der „pflegerischen Kurzintervention Übergangsbegleitung“, 2) ein systematisches Review mit Meta-Analyse zur zusammenfassenden Analyse der Wirkungen von Übergangs-Interventionen und 3) eine systematische Evaluation der Experienced Involvement (EX-IN) Weiterbildungen zum Peer zur Untersuchung des Einflusses der Weiterbildung auf die Teilnehmenden.

Die Studien verdeutlichten, dass gerade die Möglichkeit auch nach der Entlassung von der therapeutischen Beziehung zu Bezugs(pflege)person zu profitieren, von Patient*innen als positiv bewertet wird. Im Hinblick auf Wiederaufnahmeraten zeigten die Ergebnisse der Meta-Analyse jedoch keine signifikanten Verbesserungen der Interventionen im Vergleich zur Standardbehandlung. Jedoch hatten die EX-IN Weiterbildungen einen therapeutischen Effekt auf die Teilnehmenden und verbessert signifikant ihre Recoveryorientierung, Selbstbeobachtung und Stigmaresistenz. Diese Kompetenzen könnten zu einem erfolgreichen Management des Übergangs beitragen.

Sektorenübergreifende Angebote können eine bedarfsgerechte, kontinuierliche psychiatrische Versorgung unterstützen. Die Studien verdeutlichen, dass derzeit noch keine adäquate theoretische Grundlage zur Modellierung der Komplexität der Übergangssituation besteht. Zukünftige Forschung sollte eine Grundlage schaffen, Core Outcomes Sets festlegen und Wirkungen der EX-IN Weiterbildung auf Teilnehmende im Übergangsprozess untersuchen.

Hegedüs, Anna: Patient*innen im Übergang von der stationären psychiatrischen Versorgung in das häusliche Umfeld: Beurteilung und Anwendbarkeit von begleitenden Interventionen für Patient*innen im Übergangsprozess, Halle (Saale), Univ., Med. Fak., Diss., 96 Seiten, 2020

Abstract

The transition from the inpatient to the outpatient psychiatric care is characterized by discontinuities in care and is therefore a critical period for many patients. The support of patients beyond the inpatient stay appears to be particularly important in order to facilitate their inclusion into the community. This can be done by means of interventions with a combination of components before and after discharge (transitional interventions) but also with interventions aimed at strengthening the competencies of the users. The aim of this work was to assess relationships and the feasibility of interventions to improve the transition of patients from inpatient psychiatric care to the community.

Three studies were carried out to address this topic: 1) a quasi-experimental pilot study on the feasibility of the "short transitional intervention in psychiatry", 2) a systematic review with meta-analysis to summarise the effects of transitional interventions and 3) a systematic evaluation of the Experienced Involvement (EX-IN) Peer Support Worker training program.

The studies highlighted that the possibility of continuing to benefit from the therapeutic relationship with the inpatient health professional after discharge is seen as positive by patients. The results of the meta-analysis, however, did not show any significant improvements in readmission rates of the intervention groups compared to treatment as usual. On the other hand, the EX-IN training program had a therapeutic effect on the participants and significantly improved their recovery orientation, self-observation and stigma-resistance. These skills have the potential to support patients in the management of transitions.

Transitional interventions that enable individual care while maintaining the therapeutic relationship could contribute to an urgently desired needs-based, continuous psychiatric care. The studies illustrated that there is currently no adequate theoretical foundation for mapping the complexity of the transitional situation. Future research should provide such a basis, define core outcomes sets for transitional interventions and examine the effects of EX-IN training on patients in the transition process.

Hegedüs, Anna: Patient*innen im Übergang von der stationären psychiatrischen Versorgung in das häusliche Umfeld: Beurteilung und Anwendbarkeit von begleitenden Interventionen für Patient*innen im Übergangsprozess, Halle (Saale), Univ., Med. Fak., Diss., 96 Seiten, 2020

Inhaltsverzeichnis

1 Einleitung und Zielstellung

1.1 Hintergrund

1.1.1 Relevanz

Die psychiatrische Versorgung von Menschen mit psychischen Erkrankungen findet mehrheitlich im ambulanten oder (teil-)stationären Bereich statt. Die stationäre psychiatrische Versorgung erfolgt in den deutschsprachigen Ländern durch Fachkliniken und Fachabteilungen an Allgemeinkrankenhäusern oder Universitätskliniken. Auf diese folgt meist die Entlassung zurück in das häusliche Umfeld, in dem die Patient*innen im Idealfall durch ambulante psychiatrische Angebote/Dienste weiter begleitet werden. Gerade in den vergangenen Jahrzehnten ist es zu einem maßgeblichen Anstieg an stationären Behandlungen gekommen, während sich gleichzeitig die durchschnittlichen Aufenthaltsdauern verkürzten und die Wiederaufnahmeraten anstiegen (Schneider et al. 2012; Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen 2018). So dauert ein psychiatrischer Klinikaufenthalt beispielsweise in Deutschland aktuell nur noch durchschnittlich 23 Tage (Roick und Malzahn 2019), wobei es in 1995 noch 41 Tage waren (Spießl et al. 2006). Dies setzt Patient*innen vermehrt unter Druck, da sie innerhalb eines kürzeren stationären Aufenthaltes einen Gesundheitszustand erreichen müssen, mit dem sie auch im häuslichen Umfeld, z.B. mithilfe ambulanter Dienste, mit ihrer Erkrankung leben können.

Dieser Übergang der Patient*innen aus dem stationären Bereich zurück in das häusliche Umfeld stellt seit jeher eine mit Versorgungsbrüchen einhergehende Schnittstelle dar: Bereits 2012 hat der Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen die Schnittstelle zwischen dem stationären und ambulanten Versorgungssektoren und die mangelnde Integration zwischen der ambulanten und der stationären Gesundheitsversorgung als eine der zentralen Schwachstellen des deutschen Gesundheitssystems identifiziert (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen 2012). Auch in der Schweiz gibt es nur vereinzelte Modellversuche, welche die stationäre und ambulante Versorgung erfolgreich integrieren. Zudem wurde der Grundsatz „ambulant vor stationär“ noch nicht ausreichend umgesetzt (Kurt et al. 2016; Schweizerische Gesundheitsdirektorenkonferenz und Bundesamt für Gesundheit 2012). Hinzu kommt, dass durch lange Wartezeiten auf eine ambulante Nachversorgung die nahtlose Weiterführung der Behandlung im ambulanten Bereich nicht immer sichergestellt ist.

So liegen die durchschnittlichen Wartezeiten auf einen psychiatrischen Tagesklinikplatz in Deutschland bei 1,5 Monaten, auf einen ambulanten Psychiater bei 2 Monaten und auf einen ambulanten Psychotherapieplatz bei etwa 4 Monaten. Eine Dauer, die von 85% der Fachpersonen als zu lang beurteilt wird (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen 2018). In der Schweiz sieht die Situation ähnlich aus: In der Befragung von Stocker et al. (2016) gaben 60% der in ambulanten Einzel-/Gruppenpraxen tätigen Psychiater*innen an, dass ihre Aufnahmekapazitäten ausgeschöpft sind. Dadurch kommt es zu durchschnittlich 6-wöchigen Wartezeiten für Patient*innen. Solche fehlende Plätze für die post-akute Betreuung und die langen Wartezeiten resultieren unter anderem auch in hohen Wiederaufnahmeraten (Stocker et al. 2016). Diese liegen innerhalb der ersten 30 Tage nach der Entlassung europaweit zwischen 8.5 und 16.5%. Nach 1 Jahr werden sogar zwischen 33.6 und 47.9% der Patient*innen wieder stationär aufgenommen (Katschnig et al. 2019). Es ist davon auszugehen, dass durch eine nahtlose Nachversorgung und die bessere Integration des stationären und ambulanten Sektors ein Teil dieser Wiederaufnahmen vermeidbar wäre.

1.1.2 Herausforderungen für Patient*innen im Rahmen des Übergangs von der stationären Versorgung ins häusliche Umfeld

Die hohen Wiederaufnahmeraten verdeutlichen, dass die Zeit nach der Entlassung aus der stationären Versorgung für viele Menschen mit psychischen Erkrankungen kritisch ist. Die Transition in das häusliche Umfeld ist ein langsamer Prozess und geprägt von Unsicherheiten, in dem das Leben neu „erlernt“ und die eigene Rolle neu bestimmt werden müssen (Redding et al. 2017). Gleichzeitig müssen auch die Erfahrungen des stationären Aufenthaltes in das Leben integriert werden, was vor allem bei unfreiwilligen Aufnahmen und nicht zufriedenstellender Behandlung herausfordernd sein kann (Niimura et al. 2016).

Aus der Literatur lassen sich verschiedene konkrete Herausforderungen identifizieren, mit denen Patient*innen kurz nach der Entlassung konfrontiert werden:

- Meta-Analysen haben gezeigt, dass das Suizidrisiko in den ersten drei Monaten nach der Entlassung aus der stationären psychiatrischen Versorgung deutlich erhöht ist (Reutfors et al. 2010; Chung et al. 2017). So lag dieses bei Menschen mit affektiven Störungen in der ersten Woche nach der Entlassung um das 176-Fache höher, als bei der Vergleichsgruppe, die in dem Zeitraum keine Entlassung aus der Klinik erlebt hatte (Reutfors et al. 2010). Qualitative Studien

verdeutlichen außerdem, dass Patient*innen, die wegen Suizidgefährdung oder Selbstverletzung stationär behandelt wurden, mit der Entlassung häufig eine Angst vor der eigenen Wohnumgebung verbinden (Owen-Smith et al. 2014). Das Zuhause wird also nicht als ein Ort der Geborgenheit wahrgenommen, sondern als „gefährlich“ empfunden, da sich dort die suizidale Krise entwickelte. Viele fühlen sich diesbezüglich nicht ausreichend auf die Entlassung vorbereitet und empfinden dies als ein Zurückgehen „in die Höhle des Löwen“ (Cutcliffe et al. 2012, S. 24).

- Weiter berichten Studien von dem Phänomen, dass Patient*innen kurz vor oder nach der Entlassung unter **Angst vor der Einsamkeit** leiden (Nolan et al. 2011; Tempel 1999; Redding et al. 2017). In mehreren qualitativen Studien gaben Patient*innen unterschiedlichen Alters und mit verschiedenen psychiatrischen Diagnosen an, dass die Klinik die Funktion eines „Zufluchtsortes“ einnehmen konnte, der vor Einsamkeit schützte und in dem den Befragten Akzeptanz und Verständnis entgegengebracht wurde (Johnson und Montgomery 1999; Redding et al. 2017; Owen-Smith et al. 2014). Nach der Entlassung aus diesem „geschützten“ Umfeld fühlten sich die befragten Patient*innen häufig alleine gelassen (Tempel 1999; Redding et al. 2017). Beispielsweise verglich eine Betroffene die Entlassung mit der „Abnabelung nach der Geburt“ (Tempel 1999, S. 42). Auch die sozialen Kontakte mit den Mitpatient*innen in der Klinik können nach der Entlassung fehlen, was die Einsamkeit weiter verstärken kann (Nolan et al. 2011).
- Zudem berichten Betroffene in den ersten Wochen nach der Entlassung immer wieder von **Schwierigkeiten mit der Strukturierung des Alltags**, z.B. von Problemen, den individuellen Tagesablauf selbst zu organisieren (Englert und Englert 2004; Niimura et al. 2016). Gründe für diese können ein Mangel an Möglichkeiten bzw. Aktivitäten in der näheren Umgebung des Wohnortes, unzureichende Information über solche Angebote oder eine fehlende Zuversicht, den ersten Schritt zur Aufnahme einer entsprechenden Aktivität zu machen, sein (Nolan et al. 2011; Englert und Englert 2004). Die Situation kann zusätzlich auch durch Nebenwirkungen von Medikamenten wie z.B. fehlendem Antrieb, Unruhe, Gewichtszunahme und der damit verbundenen Verminderung vom Selbstwert erschwert werden (Niimura et al. 2016).
- Einen weiteren Problembereich stellt die Furcht der Betroffenen vor **Stigmatisierung, Isolierung, Ausgrenzung** und **Demütigung** aufgrund ihrer seelischen Erkrankung bzw. ihres vergangenen psychiatrischen Klinikaufenthaltes dar (Tempel 1999; Redding et al. 2017; Keogh et al. 2015;

Owen-Smith et al. 2014). Patient*innen berichten nach einem Klinikaufenthalt von stigmatisierenden Erfahrungen und fehlender Wertschätzung von Seiten ihres sozialen Umfeldes (Redding et al. 2017; Keogh et al. 2015). Sie äußern auch eine Angst vor den Reaktionen der Personen (Nachbar*innen, Freund*innen, Familie, usw.), die vor der Einweisung in die Klinik das „auffällige" Verhalten des Betroffenen miterlebt haben (Tempel 1999). Diese Furcht beeinflusst wiederum das Verhalten in der Gemeinschaft negativ (z.B. indem sich die Person zurückzieht) und erschwert die Integration in die gewohnte Lebenswelt (Tempel 1999). Dies wiederum führt zum Phänomen bzw. dem Gefühl der Einsamkeit.

1.1.3 Interventionen des Übergangsmanagements

In Anbetracht der vielfältigen Herausforderungen der Patient*innen kann die adäquate Vorbereitung auf und Begleitung während dieser vulnerablen Phase des Übergangs als besonders wichtig beschrieben werden. Dabei können spezifische Interventionen im Kontext des Entlassungsmanagements im stationären Bereich, aber auch Interventionen im ambulanten Bereich unterstützen.

In der Literatur werden drei Arten von Interventionen unterschieden, die im Kontext des psychiatrischen Entlassungsmanagements eingesetzt werden (Vigod et al. 2013):

a) Interventionen mit Komponenten **vor der Entlassung** aus der Klinik („pre-discharge"), bspw. Psychoedukation, Bedarfserhebung, Organisation der Nachversorgung durch z.B. Vereinbaren von Termine und Erstellen von Übergabeberichte;
b) Interventionen mit Komponenten **nach der Entlassung** aus der Klinik („post-discharge"), bspw. telefonische Kontaktaufnahmen mit oder Hausbesuche bei Patient*innen, Erinnerungsbriefe/-anrufe für Termine beim Nachversorger, Angehörigenedukation oder Kommunikation mit Angehörigen, Peer Support;
c) Interventionen mit einer Kombination von Komponenten **vor und nach der Entlassung** („bridging" – Übergangs-Interventionen) bspw. Bedarfserhebung vor der Entlassung kombiniert mit der Kontaktaufnahme mit den Nachversorgern und Hausbesuchen nach der Entlassung.

Im Gegensatz zu den Interventionen, die ausschließlich vor (a) oder nach (b) der Entlassung stattfinden, ermöglichen die Übergangs-Interventionen (c) die Aufrechterhaltung der **therapeutischen Beziehung**, die während des stationären Aufenthaltes aufgebaut wurde. Ebendiese therapeutische Beziehung ist zentral für die

psychiatrische Pflege (Peplau 1992) und stellt eine Grundlage für den Aufbau interner Evidence dar (Behrens und Langer 2016). Diese interne Evidence, d.h. jenes Wissen über den/die Klient*in selbst (z.B. seine/ihre Ressourcen und Teilhabeziele), das nur in der Begegnung zwischen der/dem einzigartigen Klient*in und Pflegenden aufgebaut werden kann, kann somit auch über den stationären Aufenthalt hinaus in Entscheidungen über Pflegeinterventionen einfließen (Behrens und Langer 2016; Behrens 2019). Diese Kombination von Elementen vor und nach der Entlassung entspricht auch dem Wunsch der Patient*innen nach einer kontinuierlichen Versorgung (Biringer et al. 2017) und gilt als hilfreich und vielversprechend bei der Unterstützung des Übergangs von Patient*innen von der stationären Versorgung in das häusliche Umfeld (Redding et al. 2017). Gleichzeitig empfehlen Guidelines sowohl eine Entlassungsplanung während des stationärem Aufenthaltes, als auch eine Kontaktaufnahme mit den Patient*innen bzw. deren Angehörigen 2-7 Tage nach der Entlassung (National Institute for Health and Care Excellence (NICE) 2016; Deutsches Netzwerk für Qualitätsentwicklung in der Pflege (DNQP) Mai 2019). Als Beispiel für eine solche Übergangs-Intervention kann die „pflegerische Kurzintervention Übergangsbegleitung“ genannt werden. Sie wurde auf Grundlage einer Literatursuche und Interviews mit Patient*innen, Angehörigen und Fachpersonen entwickelt und bietet eine Möglichkeit des Überleitungsmanagements mit individuellen, patientenzentrierten Elementen vor und nach der Entlassung (Hegedüs et al. 2013). Dadurch können (Pflege-)Fachkräfte den Pflege-/Unterstützungsbedarf der Patient*innen vor der Entlassung erheben, eine individualisierte Entlassungsplanung erstellen und diesen Bedarf bereits vor Entlassung oder im Rahmen der Nachsorge, z.B. durch Hausbesuche, decken.

Obwohl in der Literatur mehrere solcher Interventionen beschrieben werden, die auch den Guidelines entsprechen, sind sie in der psychiatrischen Praxis nur selten anzutreffen. Es erscheint unklar, inwiefern sie im stationären Alltag anwendbar sind. Es fehlt an Studien, die ihre Anwendbarkeit im deutschsprachigen Raum untersuchen. Außerdem fehlt es an systematischen Reviews und Meta-Analysen, die die Wirksamkeit der Interventionen auf Patient*innen-Outcomes zusammenfassend analysieren würden. Denn bisherige systematische Reviews fokussierten entweder auf eine große Bandbreite an Interventionen z.B. inkl. jener mit Komponenten vor oder nach der Entlassung (Vigod et al. 2013), Interventionen mit Patient*innen mit bestimmten Diagnosen (z.B. Depression) (Holzinger et al. 2017) oder in bestimmten Settings (z.B. Forensik) (Fazel et al. 2016). Ein systematisches Review zu Übergangs-

Interventionen wäre nötig, um Empfehlungen für oder gegen die Nutzung solcher sektorenübergreifender Interventionen aussprechen zu können.

Neben diesen Übergangs-Interventionen, die ausschließlich im Kontext der Entlassung und Überleitung stattfinden, haben auch ambulante Ansätze das Potential die Betroffenen zu stärken und ihnen den Übergang aus der Klinik zu erleichtern. Neben einer Vielzahl an ambulanten Diensten und Therapien, empfehlen das britische National Institute for Health and Care Excellence (NICE) (2016), aber auch die S3-Leitlinie der DGPPN (2019) den Einsatz von **Peer-support** – also die Unterstützung durch ausgebildete, gegenwärtig oder ehemals betroffene psychisch kranke Menschen (so genannte Peers). Diese Empfehlungen resultieren aus der Tatsache, dass die Tätigkeit von Peers im Kontext der recovery-orientierten psychiatrischen Versorgung vermehrt an Bedeutung gewinnt (Mahlke et al. 2014; Deutsche Gesellschaft für Psychiatrie 2019; National Institute for Health and Care Excellence (NICE) 2014). Maßnahmen zur Unterstützung der Recovery, d.h. der Genesung, könnten dazu beitragen, dass Kompetenzen aufgebaut werden, die auch beim Übergang aus der stationären psychiatrischen Versorgung nach Hause unterstützend wirken. Ein solche Maßnahme könnte die **Experienced Involvement (EX-IN) Weiterbildung** darstellen, die das Ziel verfolgt, Menschen mit psychischen Erkrankungen als Peers bzw. Expert*innen aus Erfahrung, Dozent*innen oder als Mitarbeitende in psychiatrischen Diensten zu qualifizieren (Utschakowski 2008; Utschakowski 2012). Die Weiterbildung richtet sich an Menschen mit psychischen Erkrankungen, die sich aber nicht in einer akuten Krise befinden, über ein unterstützendes soziales Netz verfügen und die Fähigkeit zur Selbstfürsorge mitbringen. Sie wird unabhängig von der stationären psychiatrischen Versorgung angeboten und besteht aus 10 Modulen, in denen die Themen *Förderung von Gesundheit und Wohlbefinden, Trialog, Empowerment, Erfahrung und Teilhabe, Recovery und Recovery-orientiertes Assessment, unabhängige Fürsprache, Selbsterforschung, Beraten und Begleiten, Krisenintervention, Lernen und Lehren* behandelt werden (Hegedüs et al. 2020b; Hegedüs et al. 2016). Inwiefern die EX-IN Weiterbildung zur Verbesserung der Kompetenzen von Teilnehmenden beiträgt, die auch im Kontext des Übergangs aus der stationären psychiatrischen Versorgung in das häusliche Umfeld nützlich sein können, wurde bisher noch nicht wissenschaftlich untersucht.

Wissenschaftliche Erkenntnisse sowohl zur Anwendbarkeit und Wirkung von Übergangs-Interventionen, als auch zum Einfluss der EX-IN Weiterbildungen auf die Teilnehmenden, können einen wichtigen Beitrag zur evidencebasierten Pflege und

Versorgung von Patient*innen im Kontext des Übergangs von der stationären psychiatrischen Versorgung in das häusliche Umfeld leisten.

1.1.4 Begrifflichkeiten und Theorie

Die vorliegende Arbeit beschäftigt sich mit dem **Prozess des Übergangs** von Patient*innen aus der **stationären psychiatrischen Versorgung ins häusliche Umfeld**. Unter psychiatrischer Klinik werden stationäre Angebote für Menschen mit psychischen Erkrankungen oder in akuten (psychiatrischen) Krisensituationen verstanden. Nach dem stationären Aufenthalt werden die Patient*innen üblicherweise in das eigene **häusliche Umfeld** oder in eine andere Einrichtung entlassen. Diese Arbeit fokussiert auf die Übergänge von Patient*innen vom stationären in den ambulanten Versorgungssektor. Entlassungen bzw. Übergänge in andere Einrichtungen (andere Klinik/Station, Rehabilitation, etc.) oder in ein betreutes Wohnen sind nicht Gegenstand dieser Arbeit.

Während die Entlassung aus der stationären Versorgung die relativ kurze Sequenz des Verlassens der Klinik bedeutet, ist der **Übergang in das häusliche Umfeld** bzw. zurück in die Lebenswelt für die Patient*innen meist von längerer Dauer und von Komplexität gekennzeichnet. In ihrer **transitions theory** geht die Pflegetheoretikerin Meleis (2010; 2000) davon aus, dass Veränderungen in der Gesundheit oder Krankheit von Menschen einen **Prozess der Transition** auslösen. Diese individuellen Übergänge sind gekennzeichnet durch Eigenschaften wie dem Bewusstsein für den Übergang, dem Engagement im Prozess, die Fähigkeit mit Veränderung umzugehen, die Dauer der Transition oder kritischen Ereignissen im Prozess und können durch persönliche (z.B. Überzeugungen, Haltungen, Vorbereitung, Wissen), gemeinschaftliche (z.B. Angehörige, Fachpersonen) oder gesellschaftliche Faktoren (z.B. Stigmatisierung) unterstützt oder gehemmt werden (Meleis 2010; Meleis et al. 2000). Eine erfolgreiche Transition ist laut Meleis et al. (2000) durch unterschiedliche Prozess- und Outcome-Indikatoren gekennzeichnet. Prozess-Indikatoren beinhalten das Gefühl der Verbundenheit, Interaktion, das sich zu Recht finden und die Entwicklung von Zuversicht und Bewältigung. Outcome-Indikatoren verdeutlichen das Beherrschen von Fähigkeiten, die für das Management des Überganges benötigt werden sowie die Integration der Ereignisse der Transition in die eigene Identität. Dieses theoretische Verständnis von Übergängen liegt dieser Dissertation zugrunde. Somit konzentriert sich die Arbeit nicht nur auf den Akt der Entlassung, sondern auch

den darauffolgenden Prozess der Adaption, der von Meleis et al. (2000) durch die oben genannten Indikatoren beschrieben wird.

Das Entlassungsmanagement ist eine Aufgabe, die in mehrere disziplinäre Zuständigkeitsbereiche fällt (z.B. soziale Arbeit, Medizin, Pflege). Die pflegerische Entlassungsplanung ist etablierter Bestandteil der pflegerischen Praxis. So nimmt auch die psychiatrische Pflege einen großen Stellenwert im Entlassungsmanagement von Patient*innen ein (Deutsches Netzwerk für Qualitätsentwicklung in der Pflege (DNQP) Mai 2019). Im Rahmen dieser Dissertation werden zwei verschiedene Interventionen untersucht: 1) Interventionen mit einer Kombination von Komponenten vor und nach der Entlassung (**Übergangs-Interventionen**) und 2) die **Weiterbildung Experienced Involvement** (EX-IN), die Patient*innen für die Arbeit als Peers in psychiatrischen Institutionen qualifiziert.

1.2 Zielstellungen

Das übergeordnete Ziel dieser Arbeit ist die Beurteilung der Zusammenhänge und der Anwendbarkeit von Interventionen zur Verbesserung des Übergangs von Patient*innen aus der stationären psychiatrischen Versorgung in das häusliche Umfeld.

Das Thema wurde durch drei Studien bearbeitet, wobei sich Studie 1 und 2 auf Übergangs-Interventionen und Studie 3 auf die Weiterbildung EX-IN konzentrierten.

Die Studien verfolgten folgende Zielstellungen:

(1) Ziel der ersten Studie war die Untersuchung der **Anwendbarkeit und Machbarkeit** der pflegerischen Kurzintervention Übergangsbegleitung (Hegedüs et al. 2018; Kapitel 5.1). Die quasiexperimentelle Pilotstudie mit Kontrollgruppe untersuchte a) die Anwendbarkeit der Intervention (Dauer, Durchführung der Interventionsteile), b) die Zufriedenheit der Patient*innen mit der Intervention, c) die Auswirkungen der Intervention im Vergleich zur Standardbehandlung auf die Bewältigung des Übergangs der Patient*innen aus der stationären psychiatrischen Versorgung in das häusliche Umfeld, d) ob sich Unterschiede in der Nutzung ambulanter oder stationärer psychiatrischer Leistungen zwischen den Gruppen zeigen, e) ob sich die Anzahl der aufgetretenen Schwierigkeiten in der Interventions- und Vergleichsgruppe unterscheiden sowie f) als wie schwierig die Patient*innen ihre Entlassung aus der Klinik erleben.

(2) Ziel der zweiten Studie war die **zusammenfassende Analyse der Wirksamkeit** von Übergangs-Interventionen zur Reduzierung von Wiederaufnahmen und der Verbesserung gesundheitlicher oder sozialer Outcomes von Patient*innen. Dazu wurde ein systematisches Review mit Meta-Analyse durchgeführt (Hegedüs et al. 2020a; Kapitel 5.2).

(3) Die dritte Studie der vorliegenden Dissertation untersuchte inwiefern sich die Weiterbildungsmaßnahme zum Peer (Experienced Involvement, EX-IN) als eine Intervention zur Stärkung der Kompetenzen von Betroffenen eignet. Ziel der Studie war die Untersuchung von **Veränderungen der Teilnehmenden** während der Weiterbildung im Hinblick auf persönliche Outcomes (Hoffnung, Selbstwirksamkeit, Selbstbeobachtung, Stigma-Resistenz, persönliche Recovery (Genesung), Lebensqualität). Dazu wurden die Weiterbildungen über mehrere Jahre hinweg systematisch evaluiert und zusammenfassend ausgewertet (Hegedüs et al. 2020b; Kapitel 5.3).

Details zum methodischen Vorgehen sind in den entsprechenden Publikationen der Studien in den Kapiteln 5.1-5.3 beschrieben.

2 Diskussion

Alle in vorliegender Dissertation untersuchten Interventionen stellen komplexe Interventionen dar (Richards und Hallberg 2015), welche konkret aus mehreren Komponenten bestehen und im Falle der Übergangs-Interventionen sogar sektorenübergreifend angeboten werden. Diese Komplexität stellt eine Herausforderungen sowohl für die Beurteilung der Zusammenhänge, als auch der Anwendbarkeit der Interventionen dar. Im Folgenden werden die Kernergebnisse der Studien im Hinblick auf diese beiden Aspekte hin diskutiert, ausgewählte Herausforderungen aufgezeigt und Schlussfolgerungen für Praxis und Forschung gezogen.

2.1 Beurteilung der Interventionen

2.1.1 Überblick Resultate der durchgeführten Studien

Im Folgenden werden die wichtigsten Resultate der durchgeführten Studien dieser Dissertation aufgeführt.

(1) Die quasiexperimentelle Pilotstudie zur „pflegerischen Kurzintervention Übergangsbegleitung“ (Hegedüs et al. 2018; siehe Kapitel 5.1) verdeutlichte, dass die Intervention gut durchführbar war und die befragten Patient*innen vor allem den Kontakt mit der Bezugspflegeperson nach der Entlassung als wertvoll empfanden. Damit zeigten sich die Relevanz der Begleitmaßnahme nach der Entlassung aus der stationären Versorgung und die Wichtigkeit der Aufrechterhaltung der therapeutischen Beziehung auch über den Klinikaufenthalt hinaus. Aufgrund der geringen Stichprobenzahl konnten jedoch keine abschließenden Aussagen zur Wirkung der Intervention im Vergleich zur Standardbehandlung gemacht werden. Es zeigte sich, dass zukünftige Forschung nötig ist, um den Übergangsprozesses besser zu verstehen und patienten-relevante sowie patient-reported Outcomes zielgerichtet und bedürfnisorientiert auswählen zu können (Hegedüs et al. 2018).

(2) Das anschließend durchgeführte systematische Review mit Meta-Analyse (Hegedüs et al. 2020a; siehe Kapitel 5.2) untersuchte die Wirksamkeit von Übergangs-Interventionen auf die Wiederaufnahme, sowie gesundheitliche und soziale Outcomes und verdeutlichte, dass die eingeschlossenen Interventionen mit Komponenten vor und nach Entlassung die Wiederaufnahmeraten im Vergleich zur Standardbehandlung statistisch nicht signifikant reduzieren konnten. Einzelne Studien konnten signifikante Verbesserungen im Hinblick auf die Anzahl und Länge von Zwangseinweisungen, die Nutzung von ambulanten Angeboten und die Funktionsfähigkeit der Patient*innen feststellen. Alle diese Studien mit signifikanten Ergebnissen untersuchten Interventionen mit Komponenten aus dem Bereich des „Case Management“ (z.B. Bedarfserhebung, Koordination der Nachversorgung) kombiniert mit Elementen der kognitiven Verhaltenstherapie (z.B. Skills Training) und/oder Psychoedukation. Aufgrund der vielfältigen Kombination der Elemente konnten im Rahmen der Meta-Analyse jedoch keine abschließenden Aussagen zu den Wirkungen der einzelnen Elemente gemacht werden (Hegedüs et al. 2020a).

(3) In der dritten Studie der Dissertation wurden die EX-IN Weiterbildungen als eine weitere mögliche Maßnahme zur Förderung von Kompetenzen untersucht, die im Management des Übergangs unterstützen können (Hegedüs et al. 2020b; Kapitel 5.3). Dazu wurden die Ergebnisse verschiedener Kursevaluationen aggregiert und zusammenfassend ausgewertet. Die Analyse ergab, dass sich die Recoveryorientierung, Stigmaresistenz und Selbstbeobachtung der Teilnehmenden signifikant während der Weiterbildung verbesserten. Teilnehmende, deren letzter stationärer Aufenthalt weniger als ein Jahr zurück

lag, hatten zu Beginn der Weiterbildung signifikant niedrigere Werte auf den standardisierten Skalen „Stigmaresistenz“ und „Selbstwirksamkeit“, als jene Personen, deren letzter Klinikaufenthalt vor mehr als einem Jahr stattfand. Während der Weiterbildung „neutralisierten“ sich diese Unterschiede jedoch, so dass bei deren Abschluss kein signifikanter Unterschied zwischen den Gruppen feststellbar war (Hegedüs et al. 2020b).

2.1.2 Kritische Betrachtung der Wiederaufnahme als Outcomemaß

Im Kontext der Beurteilung der untersuchten Übergangs-Interventionen fiel auf, dass das am häufigsten untersuchte Outcome die Wiederaufnahmerate in den ersten drei bis 18 Monaten nach der Entlassung war (Hegedüs et al. 2020a). Dadurch konnte zwar eine Meta-Analyse zum Outcome „Wiederaufnahmerate“ durchgeführt werden (Hegedüs et al. 2020a), aber es wurde auch deutlich, welche kontroverse Rolle dieses Outcome in der Interpretation der Wirkung von Interventionen zur Unterstützung des Übergangs hat.

Aus ökonomischer und gesundheitspolitischer Perspektive betrachtet stellen Wiederaufnahmeraten einen **Qualitätsindikator für die stationäre Behandlung** dar (Durbin et al. 2007). Um Gesundheitskosten einzudämmen, sollten die tendenziell kostenintensiveren stationären Aufenthalte möglichst reduziert und die Versorgung vermehrt durch ambulante Dienste erbracht werden (Maurer et al. 2017). Gleichzeitig berichten Patient*innen von negativen Erfahrungen während des Klinikaufenthaltes und von Diskriminierung, Stigmatisierung oder fehlender Wertschätzung seitens des sozialen Umfeldes nach der Entlassung (Redding et al. 2017; Keogh et al. 2015). So werden Wiederaufnahmen von Patient*innen mit der Entlassung zu einem als ungeeignet erachteten Zeitpunkt in ein schwieriges Umfeld, das durch Instabilität und soziale Ausgrenzung charakterisiert ist, in Verbindung gesetzt. Die Wiederaufnahme ist demnach ein Resultat unzureichender interner, externer und zwischenmenschlicher Ressourcen, mit denen das Leben in der Gemeinde nicht aufrechterhalten werden konnte (Duhig et al. 2017). Aus diesen Gründen erscheint es sinnvoll, die Anzahl der Wiederaufnahmen und den damit verbundenen Kostenfaktor sowie die Belastung der Patient*innen möglichst zu reduzieren und folglich die Qualität der Versorgung bzw. den Erfolg von Übergangsinterventionen anhand von Wiederaufnahmeraten zu bestimmen.

Es gibt aber auch Gründe die für eine **kritische Betrachtung der Wiederaufnahmeraten** sprechen. So zeigten Befragungen von Patient*innen auf, dass

eine Wiederaufnahme auch einen positiven, wünschenswerten Schritt im Genesungsprozess darstellen kann (Ådnanes et al. 2018). Die Klinik kann bei einer Wiederaufnahme daher auch als Zufluchtsort wahrgenommen werden, der eine Neustrukturierung und die Stärkung von Ressourcen ermöglicht bzw. ermöglichen kann (Duhig et al. 2017; Redding et al. 2017; Ådnanes et al. 2018). Folglich können Wiederaufnahmen aus der Perspektive der Patient*innen auch positiv und wünschenswert sein und sind nicht, wie aus der ökonomischen Perspektive betrachtet, immer als negativ zu werten.

Ein weiterer Grund für die kritische Betrachtung der Wiederaufnahmeraten als Outcome ist die Vielzahl an Einflussfaktoren auf das Risiko der Wiederaufnahme. So konnten Studien aufzeigen, dass krankheitsbezogene Faktoren (z.B. Diagnose schwerer psychischer Störung, Komorbiditäten, psychotische Symptome, überaktives und aggressives Verhalten), die Nutzung psychiatrischer Versorgung (z.B. Therapietreue bei Medikamenteneinnahme, vergangene Krankenhausaufenthalte) und Verfügbarkeit gemeindepsychiatrischen Versorgung, aber auch soziodemografische (z.B. Alter) und die Wohnsituation einen Einfluss auf das Risiko einer Wiederaufnahme haben (Donisi et al. 2016; Sfetcu et al. 2017; Yamaguchi et al. 2019; Tulloch et al. 2016; Katschnig et al. 2019). Die Vielzahl an Faktoren verdeutlicht die Komplexität der Entlassung bzw. Wiederaufnahme und stützt die Kritik an dem Outcome der Wiederaufnahme. So stehen Forschende vor der Herausforderung die Einflussfaktoren in ihren Studien möglichst gut zu kontrollieren. Aber selbst in randomisierten, kontrollierten Studien mit guter Studienqualität können selten alle potentiellen Einflussfaktoren auf das primäre Outcome kontrolliert werden. So ist es unabdingbar, auch weitere Outcomes und Confounder-Variablen in die Überprüfung von Interventionen im Kontext der Entlassung einzubeziehen und Wiederaufnahmeraten nicht als alleinige Indikatoren für die Qualität der Versorgung oder von Interventionen zu betrachten.

Aus diesem Grund untersuchten alle im Rahmen der vorliegenden Dissertation durchgeführten Studien (Hegedüs et al. 2020a; Hegedüs et al. 2018; Hegedüs et al. 2020b; siehe Kapitel 5.1-5.3) die Wirkung der Interventionen auch auf andere Outcomemaße. Damit gehen die Arbeiten auch mit der Empfehlung einher, die Perspektive der Nutzenden in der Untersuchung von Interventionen zu berücksichtigen und Instrumente zur Selbsteinschätzung von Patient*innen einzusetzen, die vor allem auch positive Outcomes (z.B. Wohlbefinden, Hoffnung, Zufriedenheit) erheben (Evans et al. 2012; Crawford et al. 2011; Thornicroft und Slade 2014).

2.1.3 Heterogenität der Outcomes und resultierende Hindernisse

Wie die kontroverse Betrachtung der Wiederaufnahmeraten als Outcome gezeigt hat, ist die **Auswahl von geeigneten Outcomemaßen** entscheidend für die Bestimmung der Wirkung einer Intervention. Diese müssen sowohl für Patient*innen und ihre Angehörigen als auch für die Entscheidungsträger im Gesundheitswesen relevant sein (Williamson et al. 2017) und gleichzeitig die Ziele der untersuchten Intervention erfassen (Buhse und Mühlhauser 2015).

Im Rahmen der Ergebnissynthese des systematischen Reviews zeigte sich eine große Bandbreite an untersuchten Outcomemaßen (Hegedüs et al. 2020a). Darunter waren strukturelle Outcomes die sich auf die Nutzung von psychiatrischen Diensten bezogen (z.B. Anzahl und Dauer stationärer Aufenthalte oder ambulanter Dienstleistungen, Kosten), krankheitsbezogene Outcomes (z.B. Symptome, Funktionsfähigkeit, Depression) und Outcomes, die sich auf soziale Aspekte bezogen (z.B. Lebensqualität, Zufriedenheit, Hoffnungslosigkeit, Einsamkeit, soziale Unterstützung, Coping). Der Vergleich mit der Pflegetheorie von Meleis (2010) verdeutlicht, dass Prozess-Indikatoren in den eingeschlossenen Studien kaum untersucht wurden. Zudem betrachteten die Outcomes die Fähigkeiten, die für das Management des Übergangs benötigt werden, lediglich im Sinne des Symptommanagements. Der von Meleis (2010) benannte Outcome-Indikator „Integration der Ereignisse in die eigene Identität“ wurde in den Studien ebenfalls nicht untersucht.

Die Vielfalt an gemessenen Outcomes und die ungenaue Passung an die Pflegetheorie von Meleis (2010) sind (1) ein Resultat der Komplexität der untersuchten Interventionen und des Settings rund um den Übergang in das häusliche Umfeld. (2) Außerdem deuten sie darauf hin, dass die Übergangssituationen in der Psychiatrie noch nicht ausreichend untersucht und theoretisch aufgearbeitet worden sind und (3) dass es keine Einigkeit darüber gibt, welche Outcomes im Kontext des Übergangs aus der stationären Versorgung erfasst werden sollen.

In einem ersten Schritt sollte daher ein **theoretisches Verständnis** über die Übergangssituationen gewonnen werden. In einem zweiten Schritt müsste ein „**Core Outcome Set**“, d.h. die Auflistung eines minimalen Sets von Outcomemaßen und Outcome-Instrumenten, die bei jeder Studie in einem bestimmten Themengebiet untersucht werden sollen, für den Kontext des Übergangs aus der stationären psychiatrischen Versorgung erstellt werden. In die Entwicklung solcher Core Outcome Sets müssen alle Interessengruppen (z. B. Patient*innen/Betroffene, Angehörige, Pflegepersonal, Ärzt*innen, Therapeut*innen und politische

Entscheidungsträger*innen) einbezogen werden (Williamson et al. 2017). Ein solches Core Outcome Set wird aktuell von einer Forschergruppe an der Nottingham University (GB) entwickelt (Projekt: Patient Safety in Mental Health Care Transitions; Leitung: Prof Justin Waring und Dr Nicola Wright). Mit der Nutzung dieser empfohlenen Outcomemaße wäre einerseits sichergestellt, dass die Studienergebnisse für ebendiese Interessengruppen relevant sind. Andererseits würde sie dazu beitragen, dass zukünftige Studien mit vergleichbaren Outcomemaße durchgeführt werden und dadurch die Durchführung von Meta-Analysen zu verschiedenen Outcomes möglich wird.

2.2 Anwendbarkeit der Interventionen

Die Anwendbarkeit der untersuchten Studien wird vor dem Hintergrund der Sektorisierung des Versorgungssystems und der Patientenpräferenzen diskutiert.

Im Rahmen der ersten Studie dieser Dissertation (Hegedüs et al. 2018, Kapitel 5.1) wurde die Kurzintervention Übergangsbegleitung auf einer stationären Einheit einer psychiatrischen Klinik in der Schweiz implementiert und getestet. Die Intervention beinhaltete, wie auch die Interventionen der 2. Studie (Hegedüs et al. 2020a, Kapitel 5.2) mehrere Komponenten, die sektorenübergreifend, vor und nach der Entlassung angeboten wurden. So kamen bspw. vor der Entlassung Elemente von Psychoedukation (z.B. individualisierte Psychoedukation) und Case Management (z.B. Bedarfserhebung, Behandlungskoordination) zum Einsatz, während nach der Entlassung verhaltenstherapeutische Elemente (z.B. therapeutische Sitzungen, Skills Training) und Peer Support angeboten wurden. Im Kontext der sektorenübergreifenden Versorgung ist der Einsatz **koordinativer und kollaborativer Maßnahmen** im Kontext des Übergangs, wie sie im Case Management angeboten werden, besonders hervorzuheben. So zeigten sich auch in anderen Studien kollaborative Interventionen z.B. durch interprofessionelle Zusammenarbeit, dem Einsatz von so genannten „Transitionsmanagern“ und die frühzeitige Kommunikation zwischen stationären Behandlern und ambulanten Versorgern als erfolgreich im Kontext der Entlassung und Überleitung (Holzinger et al. 2017; Vigod et al. 2013; Sfetcu et al. 2017). Die verschiedenen Herausforderungen an der Schnittstelle zwischen den Sektoren, denen Fachpersonen und Patient*innen gegenüber stehen (z.B. mangelnde Kooperationsbereitschaft zwischen den Mitarbeitenden der Sektoren, Unterbruch der Behandlung beim Wechsel von ambulant zu stationär oder stationär zu ambulant, Informationsverlust wegen mangelndem Austausch) (Deuschle et al. 2020),

verdeutlichen wieso koordinative Maßnahmen eine vielversprechende Tendenz Richtung Wirksamkeit aufweisen (Hegedüs et al. 2020a).

Wie die erste Studie der Dissertation zeigte, scheinen Übergangs-Interventionen außerdem im Schweizer Versorgungskontext in der Praxis anwendbar und können ohne große Veränderungen in den stationären Alltag implementiert werden (Hegedüs et al. 2018). Dies unterscheidet Übergangs-Interventionen von komplexen, integrierenden Behandlungsmaßnahmen bei denen z.B. die Behandlung sowohl hochakuter wie ambulanter Patient*innen in eine Versorgungseinheit integriert wird (Track-Modell) (Deuschle et al. 2020) oder von der stationsäquivalenten Behandlung (StäB oder Home Treatment), wie sie in Deutschland und der Schweiz immer häufiger vorzufinden ist (Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Neurologie (DGPPN) 2018). Welche Art von Interventionen eingesetzt oder empfohlen werden können, ist immer abhängig vom Kontext, den Bedarfen und den vorhandenen Ressourcen. Ohne Zweifel bleibt jedoch, dass es sektorenübergreifende Maßnahmen zur Verbesserung des Übergangs von Patient*innen aus der psychiatrischen Versorgung in das häusliche Umfeld braucht.

Aus der Perspektive der Patient*innen erscheinen koordinative Maßnahmen weniger wichtig, als **Maßnahmen, die Wissen oder Kompetenzen vermitteln**, um die eigenen Erfahrungen besser kontextualisieren bzw. konzeptualisieren und damit in das Leben integrieren zu können (Keogh et al. 2015; Meleis 2010). Gleichzeitig sind aber auch Interventionen wichtig, die dabei helfen sinnvolle Aktivitäten (z.B. Freizeit oder Arbeit) und ein stützendes soziales Netzwerk aufzubauen oder aufrechtzuerhalten (Keogh et al. 2015; Mutschler et al. 2019). Keogh et al. (2015) weisen außerdem darauf hin, dass interne oder externe „Recovery-Katalysatoren“ notwendig sind, die bei der Konzeptualisierung und Kontextualisierung der Erfahrungen des Klinikaufenthalts helfen. In diesem Zusammenhang erscheint der **Einbezug von Peers** besonders wertvoll (Keogh et al. 2015). Sie vermitteln Wissen aus ihrer eigenen Erfahrung und können als „Recovery-Katalysatoren“ Betroffene gezielt bei der Integration der Ereignisse in die eigene Identität unterstützen (Keogh et al. 2015; Mahlke et al. 2017; Deutsche Gesellschaft für Psychiatrie 2019). Hier wird auch der doppelte Wert der EX-IN Weiterbildungen deutlich: Einerseits qualifizieren sie Betroffene, damit diese als Peers Patient*innen in verschiedenen Settings, z.B. im Übergang aus der psychiatrischen Versorgung in das häusliche Umfeld, unterstützen können. Andererseits trägt die Weiterbildung zu einer Verbesserung der Kompetenzen der Weiterbildungsteilnehmenden selbst bei. So erfahren die Kursteilnehmenden z.B. durch das Gruppensetting der Weiterbildung über einen längeren Zeitraum selber „peer

support“ und können ihre Recoveryorientierung, Stigmaresistenz und Selbstbeobachtung während der Weiterbildung signifikant verbessern (Hegedüs et al. 2020b). Diese Fähigkeiten könnten unterstützend für den erfolgreichen Übergang aus der stationären psychiatrischen Versorgung ins häusliche Umfeld sein. Nicht zuletzt könnten dadurch auch stationäre (Wieder-)Aufnahmen verhindert werden. Weitere Studien sind jedoch nötig, um diesen Zusammenhang wissenschaftlich genauer zu untersuchen.

2.3 Fazit und Ausblick

2.3.1 Schlussfolgerungen der Studien

Die vorliegende Dissertationsschrift befasste sich mit komplexen Interventionen, die das Potential haben, den Übergang der Patient*innen aus der stationären psychiatrischen Versorgung in das häusliche Umfeld zu verbessern. Die interessierenden Interventionen wurden anhand dreier wissenschaftlicher Studien (siehe Kapitel 5.1-5.3) mit unterschiedlichem methodischem Design untersucht. Die Studien und die literaturbasierte Diskussion verdeutlichen, dass gerade die Möglichkeit, auch nach der Entlassung von der therapeutischen Beziehung zu Bezugs(pflege)personen zu profitieren, von Patient*innen als positiv bewertet wird (Hegedüs et al. 2018). Im Hinblick auf Wiederaufnahmeraten zeigen die aggregierten Ergebnisse der Meta-Analyse (Hegedüs et al. 2020a) jedoch keine signifikanten Verbesserungen der Interventionen im Vergleich zur Standardbehandlung. Interventionen, welche signifikante Ergebnisse aufzeigten, beruhten v.a. auf Elementen des „Case Managements“ (Hegedüs et al. 2020a). Allerdings basieren die Ergebnisse auf einer eingeschränkten Evidencegrundlage, die auf eine mangelnde Studienqualität und große Heterogenität an untersuchten Outcomemaßen der eingeschlossenen Studien zurückzuführen ist. Die Komplexität des Übergangs von der stationären Versorgung in das häusliche Umfeld erschwert zusätzlich die systematische Untersuchung der Interventionen.

Neben Übergangs-Interventionen haben auch alternative Maßnahmen wie die EX-IN Weiterbildung das Potential Patient*innen bei der Aneignung der Kompetenzen, die zum erfolgreichen Management des Übergangs nötig sind, zu unterstützen. So hatte die Weiterbildung einen therapeutischen Effekt auf die Teilnehmenden und verbessert signifikant ihre Recoveryorientierung, Selbstbeobachtung und Stigmaresistenz (Hegedüs et al. 2020b).

2.3.2 Implikationen für Praxis und Forschung

Sektorenübergreifende Angebote, die eine individuelle Versorgung unter Beibehaltung der therapeutischen Beziehung ermöglichen, könnten zu einer dringend gewünschten bedarfsgerechten, kontinuierlichen psychiatrischen Versorgung beitragen (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen 2018). Da die untersuchten Interventionen sowohl den **Empfehlungen** des Expertenstandards Entlassungsmanagement in der Pflege (Deutsches Netzwerk für Qualitätsentwicklung in der Pflege (DNQP) Mai 2019), der NICE Guidelines (2016) und den Bedürfnissen der Patient*innen entsprechen, können sie ergänzend oder als Alternative für andere Interventionen zur Entlassungsplanung oder Übergangsbegleitung von Patient*innen aus der stationären psychiatrischen Versorgung in das häusliche Umfeld in Betracht gezogen bzw. empfohlen werden. Ihre externe Evidence in Hinblick auf eine Reduktion von Wiederaufnahmen ist jedoch noch nicht abschließend nachgewiesen (Hegedüs et al. 2020a). Interventionen im Kontext des Übergangs sollten jedoch nicht primär auf eine Vermeidung von Wiederaufnahmen abzielen, sondern vor allem die Verbesserungen von patienten-relevanten und patient-reported Outcomes wie z.B. Recovery, Lebensqualität, Partizipation oder die Integration der Ereignisse in die Identität fördern. Das Ziel sollte eine lückenlose, bedarfsgerechte, ganzheitliche Versorgung der Patient*innen sein, um sie optimal in der Inklusion in das häusliche Umfeld zu unterstützen. Dabei können auch Interventionen empfohlen werden, wie z.B. die EX-IN Weiterbildung, die die Genesung und konkrete Kompetenzen der Patient*innen fördert, und auf eine allgemeine Verbesserung der Gesundheitszustandes der Betroffenen abzielt. Der Entscheid zum Einsatz einer Intervention im Kontext der Entlassung muss jedoch auch immer unter Einbezug der internen Evidenz des/der jeweiligen Patient*in (z.B. den Präferenzen oder Teilhabebedürfnissen) getroffen werden (Behrens und Langer 2016).

Die Bearbeitung und Diskussion des Themas „Übergang aus der stationären psychiatrischen Versorgung in das häusliche Umfeld“ verdeutlichte weiteren **Forschungsbedarf**, der in drei Stoßrichtungen eingeteilt werden kann:

(1) Die große Heterogenität an Outcomes und Interventionen der in die Meta-Analyse (Hegedüs et al. 2020a; siehe Kapitel 5.2) eingeschlossenen Studien deuten darauf hin, dass derzeit noch keine adäquate theoretische Grundlage zur Modellierung der Komplexität der Übergangssituation im psychiatrischen Setting besteht. Eine **Meta-Synthese** bereits bestehender qualitativer Studien oder **ergänzende qualitative Studien** sind nötig, um ein besseres Verständnis der Übergangs-Situation zu erarbeiten und die spezifischen Erfahrungen der

Patient*innen mit der Entlassung und dem Prozess des Übergangs im Setting der Psychiatrie zu konzeptualisieren und entsprechend zu verstehen.

(2) Bevor weitere randomisierte kontrollierte Studien zur Bestimmung der Wirksamkeit von Interventionen durchgeführt werden, sollten die relevanten Outcomes für Patient*innen und weitere Anspruchsgruppen definiert und in **Core Outcomes Sets** festgelegt werden (Keeley et al. 2016).

(3) Im Zusammenhang mit der EX-IN Weiterbildung sollte eine **Studie mit Mixed-Methods Design** durchgeführt werden. Im quantitativen Teil könnte mittels Kontrollgruppen- und einem Längsschnittdesign die Wirkung der Weiterbildung auf patienten-relevante und patient-reported Outcomes weiter geprüft werden. Mittels eines ergänzenden qualitativen Teils könnte außerdem die subjektive Bedeutung der Outcomes bzw. der Weiterbildung im Kontext des Übergangs der Teilnehmenden von der Klinik in das häusliche Umfeld untersucht werden.

2.3.3 Relevanz der Arbeit

Die vorliegende Dissertation verdeutlicht die Problematik des Übergangs von der stationären psychiatrischen Versorgung in das häusliche Umfeld: nicht nur international wurde in den letzten Jahren viel dazu publiziert, sondern auch im deutschsprachigen Raum ist es ein aktuelles Thema (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen 2018). Durch die Erkenntnisse dieser Arbeit, aber auch durch angrenzende nationale Aktivitäten wie z.B. die Aktualisierung des Expertenstandards, können die Übergänge zwischen den Sektoren weiter an Aufmerksamkeit gewinnen und konkrete Maßnahmen umgesetzt werden, um die Patientenversorgung zu verbessern. Die Arbeit trägt dazu bei, die aktuelle Evidencelage aufzuarbeiten, Schwachstellen zu identifizieren und verknüpft zudem klassische Interventionen im Sinne des Übergangsmanagements mit einer Maßnahme, die bisher primär auf die Qualifizierung von Betroffenen als Peers abgezielt hatte. Weitere Studien sind nötig, um den identifizierten Herausforderungen zu begegnen und die Versorgung der Patient*innen an der Schnittstelle zwischen stationärer psychiatrischen Versorgung und dem häuslichen Umfeld nachhaltig zu verbessern.

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4 Thesen

1. Der Übergang aus der stationären psychiatrischen Versorgung in das häusliche Umfeld stellt für viele Patient*innen einen besonders kritischen Zeitraum dar. Er ist gekennzeichnet durch Herausforderungen wie z.B. einem erhöhten Suizidrisiko, Einsamkeit, Stigmatisierung, und Schwierigkeiten mit der Strukturierung des Alltags.

2. In der Literatur werden verschiedene Interventionen zur Begleitung des Übergangs beschrieben. Interventionen mit einer Kombination von Komponenten vor und nach der Entlassung (Übergangs-Interventionen) könnten zu der dringend gewünschten bedarfsgerechten, kontinuierlichen psychiatrischen Versorgung beitragen.

3. Die Ergebnisse der Meta-Analyse zeigen, dass Übergangs-Interventionen im Vergleich zur Standardbehandlung keinen signifikanten Effekt auf die Wiederaufnahme von Patient*innen haben. Es gibt Hinweise, dass Interventionen mit Komponenten aus dem Case Management, der kognitiven Verhaltenstherapie und/oder Psychoedukation signifikante Verbesserungen im Hinblick auf die Anzahl und Länge von Zwangseinweisungen und Nutzung von ambulanten Angeboten erzielen können.

4. Die Wirkung von Übergangs-Interventionen wird mit einer Vielzahl unterschiedlicher Outcomemaße untersucht. Ein Vergleich untereinander ist aufgrund dieser Vielfalt kaum möglich. Daher sollte ein „Core Outcome Set“, d.h. die Auflistung eines minimalen Sets von Outcomemaßen und Outcome-Instrumenten, erstellt werden.

5. Das Outcome der Wiederaufnahme eignet sich nicht als alleiniger Indikator für die Untersuchung der Wirkungen von Übergangs-Interventionen. Forschende müssen daher sowohl patienten-relevante als auch patient-reported Outcomes für Interventionen im Kontext des Entlassungsmanagements berücksichtigen.

6. Die Weiterbildung zum Peer (EX-IN) trägt signifikant zu einer Verbesserung verschiedener Outcomes der Teilnehmenden bei, und hat das Potential, Patient*innen bei der Aneignung der Kompetenzen, die zum erfolgreichen Management des Übergangs nötig sind, zu unterstützen.

7. Die Komplexität des Übergangs von der stationären Versorgung in das häusliche Umfeld erschwert die systematische Untersuchung der Interventionen. Studien sind nötig, um eine theoretische Grundlage für die Komplexität und Erfassung der Übergangssituation zu schaffen.

5 Übersicht der Publikationen der Dissertation

5.1 Outcomes and feasibility of the short transitional intervention in psychiatry in improving the transition from inpatient treatment to the community: A pilot study

Hegedüs, A., Kozel, B., Fankhauser, N., Needham, I., & Behrens, J. (2018). Outcomes and feasibility of the short transitional intervention in psychiatry in improving the transition from inpatient treatment to the community: A pilot study. *International journal of mental health nursing, 27*(2), 571–580.

Abstract

Discharge from psychiatric inpatient care is frequently described as chaotic, stressful, and emotionally charged. Following discharge, service users are vulnerable to becoming overwhelmed by the challenges involved in readapting to their home environments, which could result in serious problems and lead to readmission. The Short Transitional Intervention in Psychiatry is a bridging intervention that includes pre- and post-discharge sections. It aims to prepare patients for specific situations in the period immediately following discharge from a psychiatric hospital. We conducted a quasi-experimental pilot study to determine the feasibility of the intervention and gain insight into the effects of the Short Transitional Intervention in Psychiatry. Two inpatient wards at a Swiss psychiatric hospital participated in the study and represented the intervention and control arms. Patient recruitment and baseline assessment were performed two weeks prior to discharge. Follow-up data were collected one week subsequent to discharge. Questionnaires measured coping, admission and healthcare usage, self-efficacy, working alliance, experience of transition, and the number of difficulties experienced following discharge. 14 and 15 patients completed follow-up assessment in the control and intervention groups, respectively. The Short Transitional Intervention in Psychiatry did not affect primary or secondary outcomes; however, it was shown to be feasible, and patients' feedback highlighted the importance of post-discharge contact sessions. Further research is required to improve understanding of the discharge experience, identify relevant patient outcomes, and assess the effectiveness of the intervention in an adequately powered randomized controlled trial.

Keywords: coping skills, discharge planning, pilot study, psychiatry, transitional care

Introduction

The period of transition from inpatient to outpatient care is a critical point for adult inpatients on psychiatric wards. Modern mental healthcare practice avoids excessive or unnecessary periods of inpatient hospitalization (Hengartner et al. 2015), resulting in early discharge for patients who might not have recovered fully. Some clinicians and service users have described the discharge experience as chaotic, stressful, and emotionally charged (Wright et al. 2016). During this period, patients are vulnerable to becoming overwhelmed by the challenges involved in readapting to their home environments (Owen-Smith et al. 2014). The problems reported include those concerning structuring the day and identifying useful activities, locating community-based support that is similar to that received on the ward (Nolan et al. 2011; Niimura et al. 2016), experiencing serious symptoms, impaired quality of life (Wells 1992; Gerson & Rose 2012), stigma resulting from admission (Keogh et al. 2015), and loneliness (Beebe 2010). Maladaptive coping when faced with these problems can increase the risk of relapse (Schennach et al. 2012), suicide (Qin & Nordentoft 2005; Reutfors et al. 2010), or readmission (Loch 2014). Between 5% and 15% of all psychiatric inpatients worldwide are readmitted within 30 days of discharge (Kuhl & Müller-Spahn 2006; Organisation for Economic Co-operation and Development 2011; Zilber et al. 2011; Vigod et al. 2015). In addition, a precipitous or badly prepared transition could lead to failure to attend outpatient appointments (Boyer et al. 2000; Mitchell & Selmes 2007; Beebe 2010), non-adherence to medication (Lieberman et al. 2005; Haro et al. 2009), or disengagement from outpatient care (Kreyenbuhl et al. 2009; Bowersox et al. 2013).

To counteract the detrimental and distressing aspects of discharge, pre- and post-discharge interventions that promote continuity of care have attracted increased interest in psychiatric research (Vigod et al. 2013). Discharge planning interventions could be effective in reducing readmission and symptomatic impairment and improving adherence to aftercare (Steffen et al. 2009); however, there is no consensus on the optimal approach (Gaynes et al. 2015). Vigod et al. (2013) revealed that psychoeducational interventions targeting disease management and life skills led to significant reductions in readmission. Used in the context of multicomponent interventions, post-discharge telephone follow up, efforts to ensure timely follow-up appointments, home visits, and peer support have also been shown to be effective (Vigod et al. 2013). However, the evidence regarding the effectiveness of discharge interventions is limited. Moreover, recent assessments of interventions reported no effects on patient outcomes, such as readmission, duration of inpatient hospitalization, needs, psychopathology, depression, quality of life, functioning, cost-effectiveness,

social support, or psychiatric problems (Puschner et al. 2011; Puschner et al. 2012; Hengartner et al. 2016).

The expert standards established by the German Network for Quality Development in Nursing (2009) recommend differentiated assessment of aftercare needs, cooperative development of a discharge and aftercare plan, and contact between nurses and patients during the two days following discharge. To support patients in their readaptation to the community, we developed a transitional intervention that adheres to the recommendations of the expert standards. The Short Transitional Intervention in Psychiatry (STeP; Hegedüs et al. 2013) is a short, multi-component, transitional intervention that aims to improve patients' coping skills following discharge from inpatient psychiatric services. To date, the effectiveness of the STeP has not been evaluated. Therefore, we aimed to (a) determine the feasibility of the STeP and (b) gain insight into the effects of the STeP on improvements in coping during the week following discharge, relative to that observed with treatment as usual.

Methods

To achieve this aim, we conducted a pilot study with a quasi-experimental, control group design and pre-post measures.

Setting

The STeP was implemented on Ward A of a private psychiatric hospital located in the German-speaking area of Switzerland in September 2014. Nursing staff received a written manual and four hours of specific training. During the following months, AH and BK supported the implementation process by answering the questions that arose and sharing their experiences with the ward team. The decision to participate in the pilot study was made following implementation of the STeP; therefore, randomization at ward level was not possible. In addition, individual randomization was not possible with admitted patients, because of hospital policies. The psychiatric hospital treats patients with all types of psychiatric diagnosis and works in accordance with a holistic, non-denominational, Christian concept. However, religion-based treatment is optional. Eligibility for admission to the wards is based on a diagnostic interview, and admission and ward allocation depends on the availability of beds. Acute admission to the hospital is therefore impossible.

In the pilot study, patients on Ward A were considered the intervention arm and those on Ward B of the same psychiatric hospital were included as the control arm. Ward A administered the STeP to each patient as routine care, and Ward B offered treatment as usual, which consisted of routine aftercare planning and a worksheet entitled 'Relapse-prophylaxis'. The worksheet included questions pertaining to possible signs/symptoms of relapse; general strategies to prevent relapse; details of individuals who should be contacted in case of problems or the need for assistance; and warning signs for family/friends, with suggestions as to how they should react and provide help.

Intervention

The STeP consists of pre- and post-discharge interventions (Hegedüs et al. 2013). It is based on Peplau's theory of interpersonal relations (Peplau 1992) and incorporates elements that are central to resource-oriented therapeutic models (Priebe et al. 2014). The STeP aims primarily to prepare patients for specific situations that could arise during the days immediately following discharge and result in serious problems; therefore, it is designed to improve patients' coping skills and help them to negotiate the week following discharge successfully.

As part of the pre-discharge intervention, patients and their primary nurses identify possible obstacles that could occur in the days following discharge. To help patients to identify unforeseen obstacles, obstacle cards were developed via interviews with service users and their relatives. The cards represent 11 frequently reported situations that could pose difficulties for service users following discharge. The main topics/situations appear on the front of the cards, and examples of questions that might arise appear on the back (e.g. 'When I meet…again for the first time in my neighbourhood' on the front of the card, with 'how will they react?', 'what should I say?', 'what will they know?', or 'will I experience stigmatization?' on the back; and 'When I'm alone in my apartment…' on the front of the card, with 'how will I cope with loneliness?', 'how will I manage household chores?', 'how will I structure my day?', 'how will I cope with being reminded of my illness?', or 'how will I manage crises?' on the back).

After patients have chosen the relevant situation/obstacle cards or phrased individual problems, problem-solving training (D'Zurilla & Goldfried 1971) is initiated. During training, patients define problems and corresponding individual goals in more detail. After brainstorming to develop solutions and rating their potential for success, patients generate action plans for behaviour and coping with the potential problems. The

problem-solving training relies on patients' decision-making skills, individual strengths, and experiential knowledge.

The post-discharge section of the STeP consists of between one and six post-discharge contact sessions involving primary nurses and patients. Dates and times are fixed during the problem-solving training. The contact is mutually agreed and includes interventions such as phone calls; text messages; e-mails; or personal meetings in cafés, on the ward, or at any other location. As the STeP aims to help patients to manage the week following discharge, it is terminated approximately seven days subsequent to discharge, with patients' cooperation.

The STeP was manualized to allow accurate application and provide answers to the most frequently asked questions (Bachnick et al. 2014a). In addition, a theory-based, didactically founded training course was developed to deliver all components of the intervention and support professional and independent implementation (Bachnick et al. 2014b).

Participants

We aimed to recruit a convenience sample of 20 participants for each study arm. The inclusion criteria were as follows: age of 18 years or older; a primary psychiatric diagnosis according to the International Classification of Diseases-10 (World Health Organization 1994); and as the intervention is based on the therapeutic relationship, hospitalization of at least seven days. The exclusion criteria were as follows: cognitive impairment and insufficient German language skills to allow questionnaire completion.

Data collection

Data were collected between 1 June and 15 September 2015. Patient recruitment and baseline assessments were performed approximately two weeks prior to planned discharge. A psychology student who was not a member of the ward team assessed patients' eligibility and invited eligible patients to participate in the study. Once participants had provided written informed consent, the student performed the baseline assessment. Follow-up interviews regarding the intervention were conducted by AH and BK via telephone seven days subsequent to discharge. This time period corresponds with the main aim of the STeP, which is to provide support during the days immediately following discharge.

The study was conducted in accordance with the ethical standards laid down in the Declaration of Helsinki (World Medical Association 2013). Ethical approval was granted by the Ethics Committee Northwestern/Central Switzerland (EKNZ 2015-127).

Outcome measures

Coping was the primary outcome, assessed using the self-rated Coping subscale of the Questionnaire to Assess Resources and Self-Management Skills (FERUS [in German]; Jack 2007). The FERUS is a reliable, valid instrument, and the 12-item Coping subscale has demonstrated good internal consistency (Cronbach's α: .73 to .89) and factorial homogeneity. Total scores range from 12 to 60, and higher scores indicate better coping skills.

We collected baseline data regarding patients' demographic characteristics and diagnoses from patients' documentation and assessed the following variables as potential confounding factors:

Self-efficacy, which was measured using the FERUS Self-efficacy subscale. The nine subscale items are rated by patients using a five-point Likert scale, and the subscale has demonstrated good internal consistency (Cronbach's α: .78 to .91) and factorial homogeneity (Jack 2007).

Working alliance between patients and primary nurses, which was measured using the German version of the 12-item self-rated Working Alliance Inventory–Short Revised (Hatcher & Gillaspy 2006; Wilmers et al. 2008). The scale has demonstrated good internal consistency (Cronbach's α: .81 - .91), and the confirmatory factor analysis showed an acceptable to good model fit in inpatients and outpatients (Wilmers et al. 2008). Total scores range from 12 to 60, and higher scores indicate better working alliance.

Concern regarding forthcoming discharge, which was rated using a 10-point scale ranging from 1 (not worried) to 10 (extremely worried).

At follow up, we asked participants about their unscheduled healthcare use, which included number of admissions to a psychiatric hospital or crisis resolution team or any unscheduled contact with healthcare services, their experience of transition following discharge (rated using a four-point Likert scale ranging from 1 [very easy] to 4 [very difficult]), and the number of difficulties faced during the week following discharge, as secondary outcomes.

To assess the feasibility of the intervention, the STeP documentation was obtained and analysed with respect to the frequency with which obstacles were chosen; duration of the pre-discharge section; completeness of problem-solving training; and type, frequency, and duration of post-discharge contact. In addition, feedback regarding the STeP was obtained from participants in the intervention group. We asked participants whether they would recommend the intervention to others and which parts of the intervention they considered useful (e.g. identifying possible obstacles, problem-solving training, or post-discharge contact sessions).

Data analysis

We compared baseline characteristics between the intervention group and patients who had withdrawn from the study, using Fisher's exact test for categorical variables and a non-parametric Wilcoxon rank sum test or t-test for continuous variables. Multivariate linear regression was performed to examine coping scores at the second time point, with baseline coping scores and other baseline variables adjusted for. We imputed missing replies using median values for the available replies from the same patient or those in the same group. The intraclass correlation coefficient (ICC) was calculated using a one-way ANOVA. All analyses were performed using the R Language and Environment for Statistical Computing and a report generated by the ReporteRs package (R Development Core Team 2016).

Results

Participants

Of the 24 patients eligible for inclusion in the intervention group, 20 (83%) consented to participate in the study, and 20 of 29 (69%) potential participants were included in the control group. Six and five patients in the control and intervention groups, respectively, did not undergo follow-up assessment; therefore, their data were excluded from the analysis (Figure 1). There was no significant difference in socio-demographic characteristics between retained participants and those lost to follow up.

(Figure 1: Flow diagram)

Participants' characteristics are shown in Table 1. The median duration of inpatient hospitalization reported for participants in the intervention group was significantly longer relative to that observed for those in the control group (intervention group: median = 49.00 [interquartile range: 45.00, 56.50] days; control group: median = 42.00 [interquartile range: 39.50, 42.00] days; p = 0.003). The other parameters measured did not differ significantly between the two groups.

(Table 1: Participants' baseline characteristics)

Outcomes

The intervention and control groups' mean coping scores increased from 25.53 (SD = 6.98) to 27.27 (SD = 4.85) and from 25.79 (SD = 8.44) to 29.93 (SD = 6.70), respectively, between baseline and follow up seven days subsequent to discharge. However, coping scores did not differ significantly between the intervention and control groups (p = .300). The ICC was 0 (confidence interval: .00 to .32; N = 2.00, k = 14.48, variance within groups: 59.56, variance between groups: 0).

All participants described the discharge experience as difficult. The scores did not differ significantly between the intervention (M = 2.67, SD = 0.62) and control (M = 2.43, SD = 0.76) groups (p = .360). In addition, 80.0% and 64.3% of the patients from the intervention and control groups, respectively, reported at least one problem during the week following discharge. However, none of these problems led to admission to a psychiatric hospital or crisis resolution team or unscheduled contact with healthcare services (Table 2).

Multivariate analysis showed no significant interactions between coping at follow up and sex, age, diagnosis, previous admissions, concern regarding discharge, self-efficacy, or working alliance.

(Table 2: Results for secondary outcomes)

STeP feasibility and feedback

The pre-discharge section of the STeP was administered to all participants in the intervention group and lasted between 30 and 85 (M = 52.86, SD = 16.26) minutes. The frequency with which obstacles were chosen is documented in Table 3. In three

cases, the problem-solving training was not completed; missing sections included ratings for the solutions developed by brainstorming (n = 2) and the action plan (n = 1).

(Table 3: Frequency with which obstacles were chosen by participants in the intervention group)

Fourteen patients participated in a post-discharge contact session following discharge. One patient did not respond to several calls and therefore had no post-discharge contact with his primary nurse. Overall, 29 sessions were provided, with an average of 2.07 per patient (SD = 0.73, range: 0–3). Most contact occurred via telephone (n = 21) or during meetings at the hospital (n = 6), in town (n = 1), or at the patient's home (n = 1). The mean contact time for each patient was 44.79 (SD = 21.78; range: 15–75) minutes.

All participants who received the STeP (n = 15) stated that they would recommend the intervention to other service users. They rated the post-discharge contact (n = 8, 53 %), identification of possible obstacles (n = 4, 26 %) and problem-solving training (n = 3, 20 %) as important features of the STeP.

Discussion

The STeP was designed to prepare patients for the transition from inpatient wards to the community in a resource- and patient-oriented manner and support them during the week following discharge. The STeP adheres to the recommendations outlined in the expert standards established by the German Network for Quality Development in Nursing (2009). This pilot study evaluated the newly designed STeP in a small sample for the first time. It lacked sufficient power to measure effects with statistical significance, but it was sufficient to demonstrate trends in improvements that could be studied in a subsequent larger study. In addition, valuable information regarding the feasibility of the intervention and participants' appraisal of the STeP was obtained.

The obstacles discussed most frequently by participants who received the STeP included 'When I am overcome by emotions and feelings again...' and 'When I'm alone in my apartment…'. Both themes correspond to themes that were previously identified by service users (e.g. experiencing symptoms and problems concerning structuring the day or locating community based support; Wells 1992; Nolan et al. 2011; Gerson & Rose 2012). However, four of the 11 obstacle cards integrated into the STeP were not

used by the participants. Our study design did not allow for the identification of problems that occurred during the week following discharge. This information would have allowed further development or adaptation of the STeP and discharge interventions in general. In particular, the accuracy of the pre-discharge section of the STeP could be assessed by determining whether the chosen obstacles occurred during the transition and how the patients coped with those problems.

The pre-discharge section of the STeP and the worksheet used by the control group were similar, as the worksheet covered themes that could also have been addressed during the pre-discharge section of the STeP. Therefore the post-discharge section, which was unique to the STeP, constituted the only distinctive element of the intervention. By targeting patients' individual needs and providing post-discharge contact sessions, the STeP accounts for the frequently reported problems, 'being bounced from one pathway to the next' and 'being dumped back in the home situation' (Wright et al. 2016). Participants' feedback supported the importance of post-discharge contact sessions by highlighting them as an important feature of STeP. In addition, the effectiveness of some components of post-discharge interventions has been demonstrated in previous research (Vigod et al. 2013). Therefore, we considered the post-discharge contact sessions a key element of the intervention.

The median duration of inpatient hospitalization reported for the intervention group was significantly longer relative to that reported for the control group. In psychiatry, the duration of inpatient hospitalization has been associated with behavioural manifestations of illness and lack of social support structures (Zhang et al. 2011). This could indicate that participants hospitalized for longer periods experienced severe social problems resulting in difficult discharge experiences. The finding that participants in the intervention group exhibited greater concern regarding discharge, relative to that observed in those in the control group, supported this hypothesis. The relationship between the duration of hospitalization and concern regarding discharge could be explored further to enhance understanding of their effects on discharge.

The number of participants in the intervention group who reported facing at least one problem subsequent to discharge was higher relative to that of those in the control group. However, this could have been a consequence of the specific nature of the intervention. The STeP relies on the assumption that anticipated problems are resolved or avoided more easily relative to unexpected situations (Hegedüs et al. 2013). Through the active examination of the discharge experience and related potential problems via the STeP, patients in the intervention group could have been more aware of potential difficulties, relative to those in the control group, and therefore reported a

higher number of obstacles. Future studies should assess the perceived appraisal of obstacles and patients' problem-solving skills, rather than the frequency with which difficulties are reported.

Similar to the findings of the pilot study, other pre- and post-discharge interventions have also been found to be ineffective with respect to the reported outcomes (Puschner et al. 2012; Hengartner et al. 2016). One reason for findings indicating that discharge interventions exerted no or negative effects could be the use of inappropriate outcome measures. Previously assessed outcomes were frequently related to the process involved in patient care (e.g. readmission rates or adherence to outpatient treatment; Steffen et al. 2009). Gaynes et al. (2015) recommended the use of outcomes that are not directly related to hospital readmission or the duration of inpatient hospitalization. For example, the measurement of successful functioning in the community could be a meaningful alternative (Gaynes et al. 2015). The decision to use coping as the primary outcome in the current study was made in accordance with these recommendations. However, the results indicated that coping, or the items of the FERUS Coping subscale (Jack 2007), did not capture the essential elements of the STeP or potentially important changes in patients' attitudes. The standardized instrument could not account for the entire psychiatric post-discharge experience. Therefore, the choice of patient-relevant outcome measures for discharge interventions should be emphasized. Comprehension of the process of readaptation to the community would facilitate the choice of outcome measures and study designs for evaluation of the impact of transitional interventions on patients' lives.

Strengths and limitations

The study was conducted in a real-life setting. The mental health nurses on the intervention ward had administered the STeP for over a year prior to data collection. Therefore, the fidelity of the intervention was high.

However, the pilot study had several limitations: First, we did not perform any formal power calculations. The small sample size might have resulted in inadequate power for the detection of differences between the intervention and control arms. Second, as we could not randomize participants' group allocation, there were significant differences in baseline characteristics between the study groups. In addition, the study was conducted at a private clinic to which acute readmission was impossible because of the hospital's waiting list policy. Third, the absence of long-term follow up could have

prevented us from capturing the effect of the intervention over time. Therefore, the generalizability of the results should be interpreted with caution.

Conclusion

This pilot study provides insight regarding the feasibility and initial effects of a short, multi-component, transitional intervention. The findings demonstrated good feasibility and reflected participants' appraisal of the intervention, particularly the post-discharge contact sessions. Quantitative data showed a slight tendency towards improvement in coping scores in both study groups but no differences between groups over time. The findings could be used to inform study designs and sample size calculation for subsequent studies examining the effectiveness of the STeP. In addition, the results indicate that further research is required to improve understanding of the discharge experience and identify relevant patient outcomes. In particular, qualitative studies would facilitate understanding of the phenomenon, the process involved, and the importance of readaptation to the community from the perspective of service users.

Regarding the effectiveness of the STeP, future studies, such as randomized clinical trials, should assess the intervention's impact on relevant patient outcomes. A mixed-methods design would also allow exploration of patients' coping strategies via qualitative research methods. This could enhance understanding of the effects of identification of possible obstacles and their anticipation via problem-solving training. The findings of such studies could extend the international literature and inform future research examining transitional interventions.

Relevance for clinical practice

The newly designed STeP was shown to be a feasible transitional intervention that aimed to prepare patients for the individual challenging situations that arose during the days following discharge, and provided support through post-discharge contact. Patients' feedback accentuated the importance of post-discharge contact, which allows mental health nurses to extend their support to include the days immediately following discharge.

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Tables

Table 1: Participants' baseline characteristics

	Intervention group (n = 15) **n (%)**	**Control group (n = 14)** **n (%)**	**p value**
Sex, female	10 (66.7)	10 (71.4)	
Previous inpatient hospitalization, yes (%)	9 (60.0)	7 (50.0)	.715
Main diagnosis			.205
F1: Mental and behavioural disorders due to use of psychoactive substances	3 (20.0)	3 (21.4)	
F2: Schizophrenia, schizotypal and delusional disorders	3 (20.0)	0 (0.0)	
F3: Mood [affective] disorders	8 (53.3)	6 (42.9)	
F4: Neurotic, stress-related and somatoform disorders	0 (0.0)	3 (21.4)	
F5: Behavioural syndromes associated with physiological disturbances and physical factors	0 (0.0)	0 (0.0)	
F6: Disorders of personality and behaviour in adult persons	1 (6.7)	2 (14.3)	

	Intervention group (n = 15) n (%)	Control group (n = 14) n (%)	p value
	Mean (SD)	**Mean (SD)**	**p value**
Age,	36.00 (8.43)	42.00 (9.59)	.084
Duration of inpatient hospitalization, days	52.27 (10.02)	44.21 (13.59)	.079
median [IQR]	42.00 [39.50, 42.00]	49.00 [45.00, 56.50]	**.003**
Concern regarding discharge,†	6.00 (2.36)	4.54 (2.33)	.112
Self-efficacy score,†	19.27 (5.64)	19.93 (7.98)	.797
Working alliance score, WAI-SR,†	29.47 (8.61)	29.00 (9.70)	.892

† One value missing in control group; SD = standard deviation; IQR = interquartile range; WAI-SR = Working Alliance Inventory–Short Revised

Table 2: Results for secondary outcomes

	Intervention group[†] **n (%)**	**Control group[‡]** **n (%)**	**p value**
Number of difficulties following discharge			.741
0	3 (20.0)	5 (35.7)	
1	5 (33.3)	5 (35.7)	
2	6 (40.0)	3 (21.4)	
3	1 (6.7)	1 (7.1)	
Readmission to a psychiatric hospital (yes)	0 (0.0)	0 (0.0)	
Admission to a crisis resolution team (yes)	0 (0.0)	0 (0.0)	
Unscheduled contact with healthcare service (yes)	0 (0.0)	0 (0.0)	

[†] n = 15; [‡] n = 14

Table 3: Frequency with which obstacles were chosen by participants in the intervention group (n = 15; multiple responses possible)

	n (%)
‘When I am overcome by emotions and feelings again...’	9 (60 %)
‘When I'm alone in my apartment…’	6 (40 %)
‘When I need something…’	3 (20 %)
‘When I have a difficult night…’	2 (13 %)
‘When I attend work/school again for the first time...’	1 (7 %)
‘Until I have arrived home...’	1 (7 %)
‘When I meet relatives/close friends again for the first time...’	1 (7 %)
‘When I meet…again for the first time in my neighbourhood...’; ‘When I have to live with...again’; ‘When I need medication...’; ‘When I have my first appointment with...’	0 (0 %)

Figures

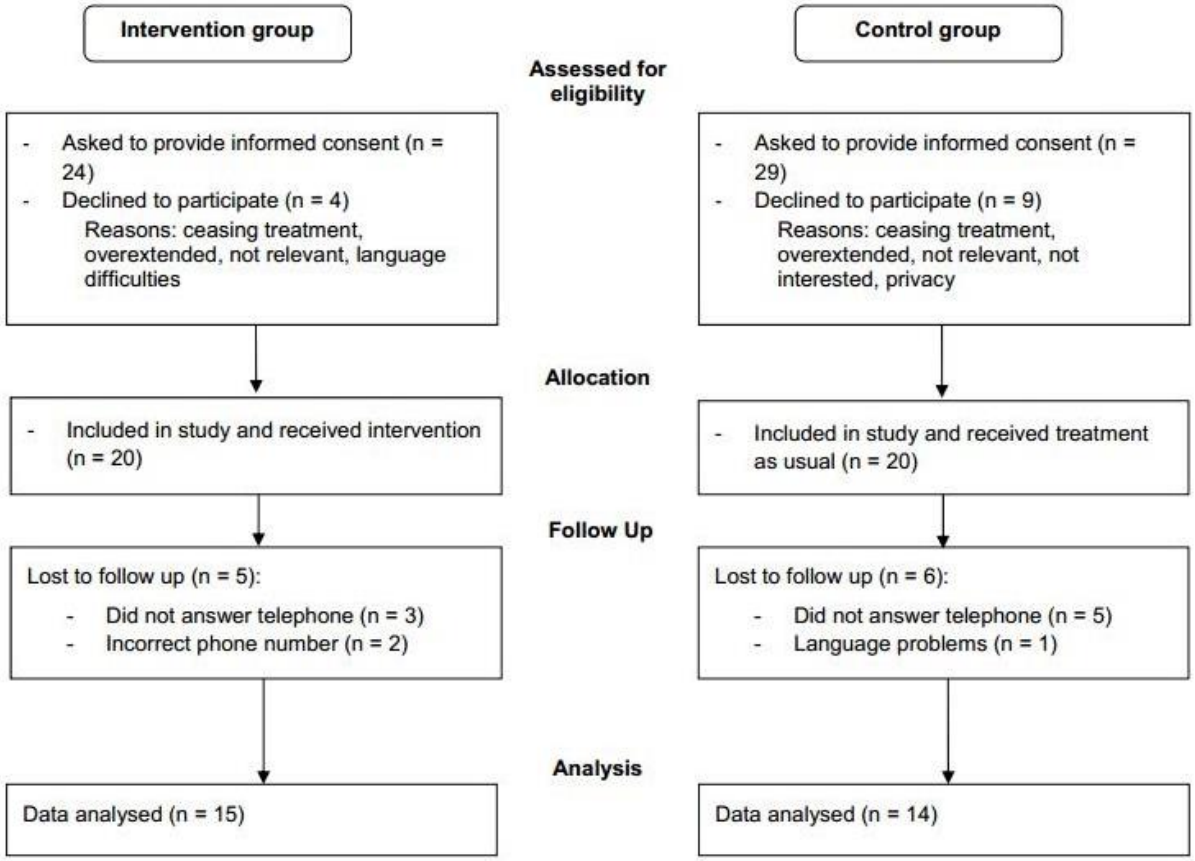

Figure 1: Flow diagram of study participation

5.2 Effectiveness of Transitional Interventions in Improving Patient Outcomes and Service Use After Discharge From Psychiatric Inpatient Care: A Systematic Review and Meta-Analysis

Hegedüs, A., Kozel, B., Richter, D., & Behrens, J. (2020). Effectiveness of Transitional Interventions in Improving Patient Outcomes and Service Use After Discharge From Psychiatric Inpatient Care: A Systematic Review and Meta-Analysis. *Frontiers in Psychiatry, 10*, 694.

Abstract

Background: The transition from psychiatric hospital to community is often hindered by challenges that influence community adjustment and continuity of care. Transitional interventions with bridging components are provided prior to discharge and continue beyond inpatient care. They provide continuity of care and may be effective in preventing readmission. We aimed to assess the effectiveness of transitional interventions with pre- and post-discharge components in reducing readmissions and improving health-related or social outcomes of patients discharged from psychiatric hospitals.

Methods: We conducted a systematic review by searching electronic databases (MEDLINE, Embase, Cochrane Library, CINAHL, PsycINFO, and Psyndex) and included randomized, non-randomized, and one-group study designs. A random effects meta-analysis was conducted with randomized controlled trials (RCTs) reporting data on readmission rates. Other study designs were synthesized qualitatively.

Results: After screening 2673 publications, 16 studies (10 RCTs, three quasi-experimental, and three cohort studies) were included and nine RCTs were included in the meta-analysis. The tested interventions included components from case management, psychoeducation, cognitive behavioral therapy, and peer support. All studies with significant improvements in at least one outcome provided elements of case management, most frequently in combination with cognitive behavioral therapy and psychoeducation. Readmission rates during follow-up ranged between 13-63% in intervention groups and 19-69% in control groups. Overall, we found an odds ratio of 0.76 (95% confidence interval = 0.55-1.05) for readmission due to transitional interventions. Heterogeneity was low at only 31% ($p = 0.17$) and the funnel plot indicated no obvious publication biases.

Conclusions: We observed that transitional interventions with bridging components were no more effective in reducing readmission than treatment as usual; however, these results are based on limited evidence. Therefore, additional high-quality research is required to conclude the effectiveness of transitional interventions. Nevertheless, transitional interventions with bridging components are preferred by service users and could be an alternative to strategies regularly employed.

1. Introduction

For psychiatric patients, the transition from hospital to community is often hindered by challenges that influence community adjustment and continuity of care (1). The first days and weeks after discharge from psychiatric institutions represent a critical phase for patients. During this time period, difficulties often arise in everyday life, such as increased risk of suicide, craving, anxiety, loneliness, lack of self-esteem, stigmatization, lack of treatment adherence, and difficulties in coping with recurring symptoms (2–13). Any of these challenges can result in symptom relapse or readmission to inpatient care. Readmission rates after 30 days vary between 9-15% in Canada and Europe (14, 15), and are approximately 18% within 4 months in Canada (14), 13% within 6 months in the United States (16), and between 33-48% within 12 months in Europe or New Zealand (15, 17). Across all countries, the risk of readmission is highest in the first 30 days after discharge (15, 18). Therefore, preventive measures are recommended to ensure the availability of seamless transition from inpatient to community care (15).

Interventions that are provided prior to discharge and continued beyond inpatient care are referred to as transitional interventions with bridging components (7). They are structured discharge management strategies and allow for the maintenance of therapeutic relationships that are established during inpatient stays. By offering support before and beyond the inpatient stay, healthcare professionals can emphasize care needs before discharge and address or follow-up with those needs in the community setting. This combination of elements prior to and after discharge fulfils patients' desire for continuity of care (19) and is considered helpful (20) and promising in supporting the effective transition from hospital to community.

Interventions aiming to improve the transition from hospital to home have been tested in studies and partly summarized in systematic reviews. These systematic reviews have either focused on a wide range of interventions, including pre- and post-intervention components (7, 21), specific patient groups (22), and settings or services (23, 24). For example, Vigod et al. (7) found evidence from non-randomized trials indicating that psychoeducational interventions help to improve disease management and everyday skills, which may reduce readmission rates of psychiatric patients. Alternatively, discharge interventions for patients with severe depression demonstrated no significant effects on readmission rates or the improvement of depressive symptoms (22); however, patients have reported that discharge planning and follow-up after discharge are essential to prevent readmission (15).

The effectiveness of transitional interventions with bridging components has not yet been summarized in systematic reviews. By limiting the interventions to those with bridging components, we expect better homogeneity and comparability than in previous systematic reviews. Therefore, we conducted a systematic review and meta-analysis to assess the effectiveness of transitional interventions with pre- and post-discharge components in reducing readmissions and improving health-related or social outcomes of patients discharged from psychiatric hospitals.

2. Methods

The present systematic review and meta-analysis adheres to PRISMA guidelines (25). A review protocol was publicly registered on PROSPERO (registration no.: CRD42019122456).

2.1. Search strategy

We searched the following databases: MEDLINE, Embase, Cochrane Library, CINAHL, PsycINFO, and Psyndex. Documents published between 1998 and May 31, 2018 were included in our search strategy. Database-specific searches included the following index terms: *("bridging" OR "transitional care" OR "patient discharge" OR "discharge planning") AND ("Psychiatric Hospital" OR "Mental Institution" OR "Mental Hospital") AND ("intervention" OR "programme" OR "preparation") NOT (child* OR dement*).* Additional searches were conducted in Google and Google Scholar to find relevant grey literature. Hand searching of the references of key papers (e.g., existing systematic reviews and included articles) complemented the search. The detailed search strategy is available upon reasonable request.

2.2. Inclusion/exclusion criteria

To be included, studies had to meet the following criteria: published studies or study protocols written in German or English, participants aged 18-65 years, participants had a psychiatric diagnosis and were discharged from a psychiatric inpatient unit. Included interventions were those that aim to improve discharge from psychiatric inpatient care to home with a combination of pre- and post-discharge components (e.g., need assessment or development of discharge plan pre-discharge and home visits or telephone contacts post-discharge). Moreover, all components of the intervention must have emanated from the inpatient setting. Finally, although randomization is desirable

to minimize selection bias, it may not be feasible in mental health care. We therefore included non-randomized or one-group study designs into our qualitative synthesis.

The following exclusion criteria were defined: interventions or programs on a structural or organizational level; psychotherapeutic treatment programs with a specific focus (e.g., therapy for substance dependence or medication adherence); interventions specifically targeting homeless persons; participants with physical or mental handicap; and discharge from forensic settings.

2.3. Data extraction and risk of bias assessment

Titles and abstracts of studies retrieved from database searches and additional sources were independently screened by two authors (AH and BK) to identify those that met inclusion criteria. The full texts were then retrieved and independently assessed for eligibility by the same two authors. Disagreements over the eligibility of any studies were resolved through discussion.

Data extraction from the included studies was carried out by one team member (AH) and checked for accuracy by another (BK). Extracted information included: study design, setting, and population; details of the intervention and control conditions; recruitment and study completion rates; outcomes and times of measurement; and information for assessment of the risk of bias. Missing or non-reported data on the primary outcome (readmission rates) was requested from study authors.

To classify the intensity of the interventions, we adapted the intervention intensity score developed by Holzinger et al. (22). The score (low/moderate/high intensity) considers the length of intervention, number of intervention components (e.g., psychoeducation, cognitive behavioral therapy [CBT], case management, and peer support), and number of contacts with the patient. Details of our adaptations and ratings are available from AH.

Two authors (AH and BK) independently assessed the risk of bias in the included studies by using the Revised Cochrane Risk-of-Bias for randomized trials (26) and the Mixed Methods Appraisal Tool for all other study designs (27). Discrepancies were solved by discussion within the team.

2.4. Data analysis

Studies were included in the present meta-analysis if data were available on readmission rates in absolute numbers or percentages. The random effects meta-

analysis was conducted with the package 'meta' (version 4.9-5) in R statistical software (version 3.6.1; R Core Team, Vienna, Austria). Odds ratios were calculated for effect sizes. Study heterogeneity was assessed by I^2, and 95% confidence intervals (CIs) were used to assess uncertainty. Forest and funnel plots were used for the graphical display of effect sizes and analyzing publication bias, respectively. Subgroup comparisons were conducted for length of intervention, risk of bias, and intervention intensity.

Meta-analyses of other outcomes were not possible due to the low number of studies and heterogeneous assessment instruments.

3. Results

3.1. Study selection and characteristics

The search strategy yielded 2673 publications, which after screening resulted in 16 included studies. There were 10 RCTs, three quasi-experimental studies, and three cohort studies. From this, nine RCTs were included in the meta-analysis (Figure 1). In the RCTs, the percentage of participants with a diagnosis of psychosis or schizophrenia varied between 8% and 73% and between 26% and 75% for participants with depressive or anxiety disorders. In the cohort studies, a strong focus on patients with psychosis or schizophrenia was apparent (range 87-100%). Study characteristics are shown in Table 1.

((Figure 1: Flow diagram of study selection process))

((Table 1: Description of included studies))

3.2. Description and classification of intervention components

The included studies tested 15 different interventions (Table 1). All interventions included multiple components and were conducted by mental health workers, nurses (a portion with a master’s degree), case or care managers, social workers, or peer support workers.

Pre-discharge interventions included components from case management, such as needs assessments (28, 29, 32, 34, 35, 40–43, discharge or care planning (e.g., crisis planning) (28, 31, 35), scheduling or preparing for follow-up appointments (39, 42), and

family or carer involvement (28, 44); psychoeducational components, such as individualized psychoeducation (33) and medication reconciliation elements (29, 44); and elements of CBT, such as skills training (29, 40, 41, 44) and peer support (38, 43). Interventions were delivered in one-to-one sessions, except for the study conducted by Khaleghparast et al. (41), where a family member was present and in Noda et al. (44), where skills training was delivered in groups.

Post-discharge components aimed to support patients during a transition period and were most frequently delivered through phone calls, home visits, or letters. Components associated with case management included: efforts to ensure timely follow-up with outpatient care providers (28, 32, 34, 39, 42), treatment coordination (28, 31, 39), timely communication between inpatient staff and outpatient care or community service provider after discharge (29, 34), monitoring of health status or implementation of post-discharge plan (31, 33, 35), and activation of resources in the social network (32). Elements of CBT consisted of therapeutic meetings with staff (30, 37) and skills training (33, 40, 41, 44). In addition, interventions included psychoeducation and counselling (31) or peer support (30, 37, 38, 43). Peer support consisted of facilitating access to local communities, promoting friendship, providing basic necessities, understanding, and encouragement. Similar to the pre-discharge components, post-discharge contact took place in sessions between patients and mental health workers, occasionally with explicit inclusion of important members of the patient's social network (32).

Interventions lasted between 1 week (40) and 2 years (33), or until a therapeutic relationship was established between the patient and outpatient care provider (30, 37); however, the majority of the interventions ended 3 months after discharge (29, 31, 32, 35, 39, 41).

Control groups received treatment as usual, which included aftercare or treatment planning (39, 40), referral to outpatient treatment (28, 29, 33, 37, 39), arrangements from community mental health services (38), and case and medication management (31). Treatment as usual in the study by Puschner et al. (35) was delivered without a manualized or structured discharge plan. Assistance from inpatient units ended after the patient was discharged, except in the study by Cuffel et al. (39). Finally, three studies did not specify treatment as usual (30, 34, 41) and an additional three studies did not apply a control group design (42-44).

3.3. Risk of bias

Details on the quality assessment of the included studies are displayed in Tables 2 and 3. From the 10 RCTs included, only the study by Hengartner et al. (32) proved to have a low risk of bias. Five RCTs were rated to have some concerns (28, 29, 31, 33, 35) and four studies (30, 34, 37, 38) were rated with high risk of bias. Khaleghparast et al. (41) did not describe a randomization process and was therefore included and rated as a study using a quasi-experimental design. Risk of bias was evident primarily in non-RCTs and studies with a one-group design due to incomplete outcome data (i.e., high drop-out rates) and potential confounders that were not accounted for.

((Table 2: Quality assessment of randomized controlled studies))

((Table 3: Quality assessment of non-randomized studies))

3.4. Intervention effects

3.4.1. Effects on readmission

Nine of the included RCTs reported readmission rates (see Table 4) and were included in the present meta-analysis. They showed available case data on a total of 1258 participants (605 in interventional groups, 653 in control). Readmission rates during follow-up ranged between 13-63% in intervention groups and 19-69% in control groups (treatment as usual). Readmission rates were higher in the control groups in all but two studies (31, 32). Overall, we found an odds ratio of 0.76 (95% CI: 0.55-1.05) for readmission due to transitional interventions (see Figure 2). Heterogeneity was low at 31% ($p = 0.17$). The funnel plot (Figure 3) indicated no obvious publication bias. Finally, subgroup comparisons for risk of bias, duration of intervention, and intensity of intervention found no significant differences (see Table 5).

((Table 4: Overview of study results))

((Figure 2: Random effects meta-analysis for readmission))

((Figure 3: Funnel plot for readmission))

((Table 5: Subgroup analysis))

3.4.2. Effects on patients' health-related or social outcomes

Three RCTs, with comparable diagnoses, reported significant improvements favoring the intervention in the following outcomes: compulsory readmission (33), length of compulsory hospital episodes (33), outpatient service use (29), continuity of care (29), and functioning (32) (Table 4). The non-randomized study by Khaleghparast et al. (41) demonstrated significant improvements in all outcome measures (i.e., readmission, symptom severity, and knowledge) in patients with psychosis or schizophrenia. Cohort studies with a one group design showed significant improvements in readmission (44), quality of life (43), functioning (43), social support, and engagement in community (43). All studies with significant effects in at least one outcome provided elements of case management (29, 32, 33, 41, 44), most frequently in combination with CBT and psychoeducation (29, 33, 44) or exclusively CBT (41), or peer support (43).

4. Discussion

We conducted a systematic review and meta-analysis of transitional interventions with bridging (pre- and post-discharge) components to assess their effectiveness in reducing readmission and improving health-related or social outcomes of patients discharged from psychiatric inpatient care. Our quantitative synthesis showed no significant effect of transitional interventions with bridging components on readmission. Considering the limitations of the available studies, there is currently no sufficient evidence to support the effectiveness of transitional interventions in comparison to treatment as usual in the prevention of readmission. Similarly, only individual studies demonstrated significant improvements in health-related and social outcomes; therefore, currently we do not have enough high-quality evidence to highlight the effectiveness of transitional interventions.

Our results corroborate other reviews on discharge interventions that summarize the evidence of a wide range of interventions (7, 21) or focus on either specific patient groups (e.g., depression) (22), settings, or services (e.g., forensic psychiatric services and early discharge) (23, 24). Holzinger et al. (22) found no significant effects of these interventions on readmission; however, included studies showed a tendency toward intervention effectiveness. Similarly, Vigod et al. (7) identified slightly lower readmission rates in the intervention groups of the included studies at 3 and 12 months; however, a quantitative meta-analysis was not possible due to substantial clinical heterogeneity. Steffen et al. (45) identified a significant effect of transitional interventions with pre- and

post-discharge components on readmission. Therefore, by limiting the interventions to those with bridging components, our systematic review adds a unique element to the current research, which can help to further understand some of the mixed results that have been demonstrated thus far. These mixed results could be explained based on the reasons for readmission. Mutschler et al. (46) argue that external factors such as poverty, interpersonal conflicts, and stigma can prevent successful transition to community. The transitional interventions included in our review considered primarily internal factors (e.g., self-efficacy, social or peer support, and coping strategies); external factors were only addressed secondarily (e.g., by peer support workers). Therefore, transitional interventions alone can only partly prevent readmission and improve community integration. Changes at the health and social support level (e.g., comprehensive community care, supported housing, and employment) are important factors to improving community integration of patients discharged from psychiatric inpatient care.

From the patients' point of view, regardless of psychiatric diagnoses or reason for admission, discharge planning, follow-up after discharge, individual coping measures, meaningful activities, and peer support and networks are essential to preventing readmission (15). Our review identified a wide spectrum of interventions and intervention components aiming to meet these needs. Other reviews have concluded that collaborative care interventions, transition managers, and timely communication between inpatient staff and outpatient care or community service providers are crucial bridging components of discharge interventions (7, 22, 47). In our review, we subsumed these components under case management. This was the most frequently used component (13 out of 16 studies) and was used by all studies that showed a significant effect in at least one outcome measure. These elements of case management might contribute to the significant effects of the interventions; however, due to the heterogeneity of the studied interventions and intervention settings, it remains unclear which components affect the outcomes measured. Further research is necessary to address this gap, such as by rigorously defining the interventions and the policy or organizational conditions by which they are applied (e.g., local payment strategies, access to care, and available resources). Researchers are challenged to apply new methods to control for these predefined conditions.

Besides the great variety of interventions, the present review revealed a multitude of outcome measures. In sum, 20 different outcomes were assessed throughout the included studies. Readmission was the most frequently reported outcome and the only one that could be assessed through meta-analysis. This variability in outcome

measurements indicates that there is no agreement on outcomes in transitional interventions in psychiatry. Consequently, it is difficult to synthesize and apply the results of different research studies (48). Since the choice of outcome measure is essential for decision making and policy, more emphasis is necessary on the choice of outcome that is suitable for the tested intervention. The development of core outcome sets (i.e., standardized sets of outcomes for a specific clinical area) can provide guidance by including all stakeholders (e.g., service users, caregivers, clinicians, and policy makers) into the development process (48). As a result, these outcomes are valued by the involved parties and account for their interests. In conjunction with the results of a study on the associations between readmission and patient-reported measures in acute psychiatric inpatients (49), we could gain an improved understanding into the relationship between patient experiences, readmission, and patient-reported outcomes. This would also allow for the conduction of meta-analyses on different outcomes and improve the significance of trials for service users, caregivers, and policy makers.

5. Conclusions

5.1. Strengths and limitations

The present review demonstrates clear limitations associated with many of the included publications. Most studies had small sample sizes and were likely underpowered to detect clinically relevant effect sizes. The overall risk of bias was high in four of the 10 RCTs. In addition, the high heterogeneity of intervention components limited their comparability and our ability to generate practice and policy implications. More detailed classification systems are needed (e.g., including characteristics of health/social care system, risk of readmission in certain populations, and quality of inpatient care) to better understand the holistic value of transition interventions.

We limited the included populations by excluding studies where we expected considerable differences during the inpatient stay or unique discharge situations (e.g., long inpatient stays in forensic settings (23, 50) or discharge into homelessness). Nevertheless, the comparability of the included studies was limited by a broad range of interventions and a high number of diverse outcomes and outcome measurements. In addition, we observed diverse definitions of “treatment as usual”, which may limit the significance of the results.

We included studies with participants across various psychiatric diagnostic groups. This did not considerably add to the heterogeneity of the review; however, a

quantitative subgroup analysis was not possible. Therefore, future research is recommended to assess the effects of transitional interventions on various psychiatric disorders.

The high risk of bias in the selected RCTs further underlines the limitations of the present study design. Therefore, the synthesis of our present systematic review offers an overview of their efficacy, while not confirming it.

Through rigorous search methods in different databases and hand search of bibliographies, we attempted to identify all possible eligible studies. The funnel plot did not indicate possible limitations regarding publication bias. By including non-randomized and cohort studies, our present review highlights the value of pragmatic study designs in this setting.

5.2. Conclusions

We observed that transitional interventions with bridging components were not more effective in reducing readmission compared to treatment as usual; however, the results are based on limited evidence. Therefore, we currently cannot make a final recommendation for or against the use of transitional interventions. Nevertheless, transitional interventions with bridging components are preferred by service users and should be considered as alternatives or supplements to regular or no discharge strategies.

Our review highlights that the identification and future design of effective interventions requires higher quality studies with resulting comprehensive publications. First, researchers need to explore proper outcome measures and reach a consensus on measured outcomes (e.g., core outcomes set). This would allow for the conduction of systematic reviews and meta-analyses for health-related and social outcomes, adding to the limited existing evidence. Second, future research on transitional interventions needs more profound classifications of interventions and health care systems. In addition, we need to understand what “treatment as usual” means across various settings to identify effective intervention components and their correlations. Third, studies are needed to assess the effects of transitional interventions or specific intervention components on various disorders. These aspects would allow for the conduction of high-quality research and generate evidence for the best practices.

Availability of supporting data

All data and material are available upon request from the corresponding author.

Ethical consideration

As this was a systematic review and meta-analysis of published data, no ethics committee approval was needed.

Authors' contribution

AH, BK, and JB planned and designed the study. AH and BK conducted the database search, screened studies for inclusion, extracted data, and assessed risk of bias. DR planned and performed the statistical analysis. AH wrote the first draft of the manuscript. All authors contributed to manuscript revision, read, and approved the submitted version.

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Figures

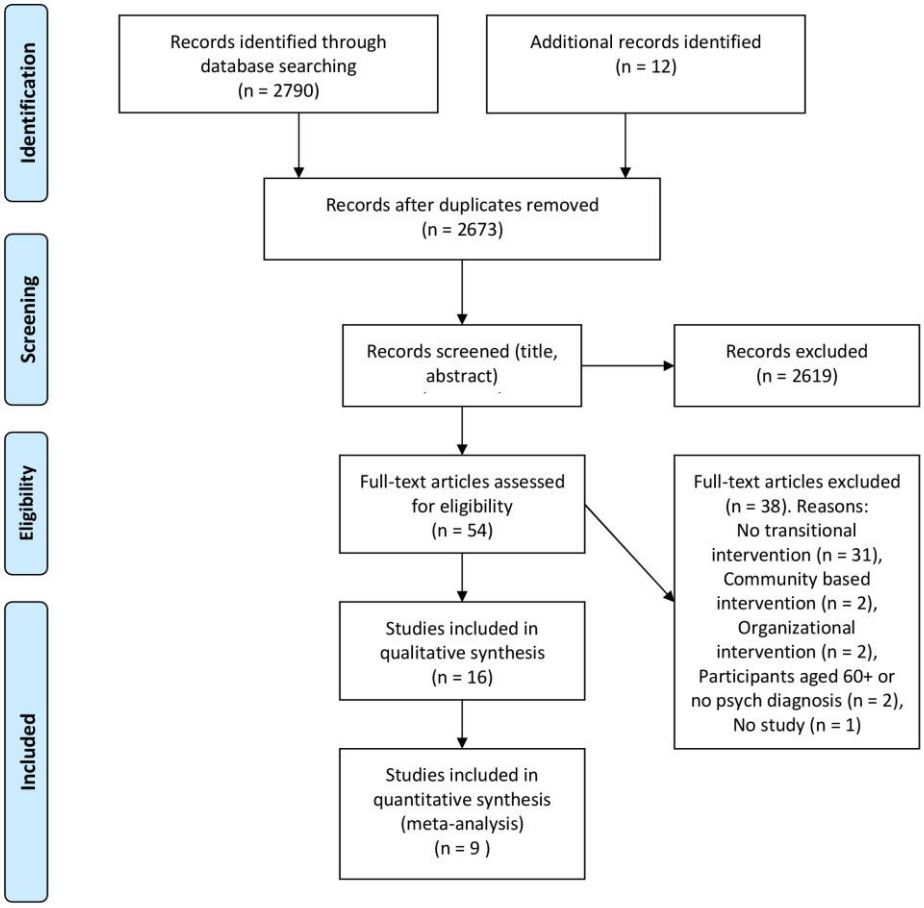

Figure 1. Flow diagram of study selection process

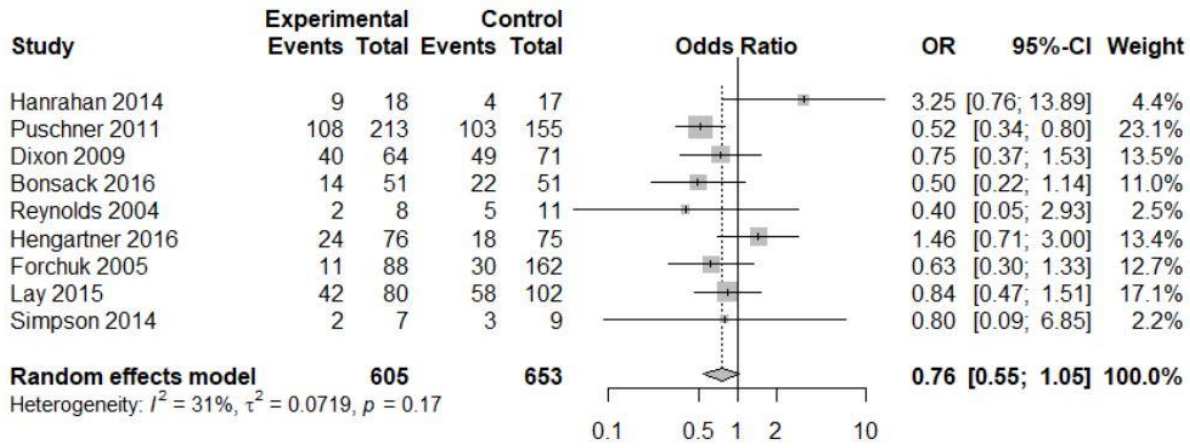

Figure 2. Random effects meta-analysis for readmission

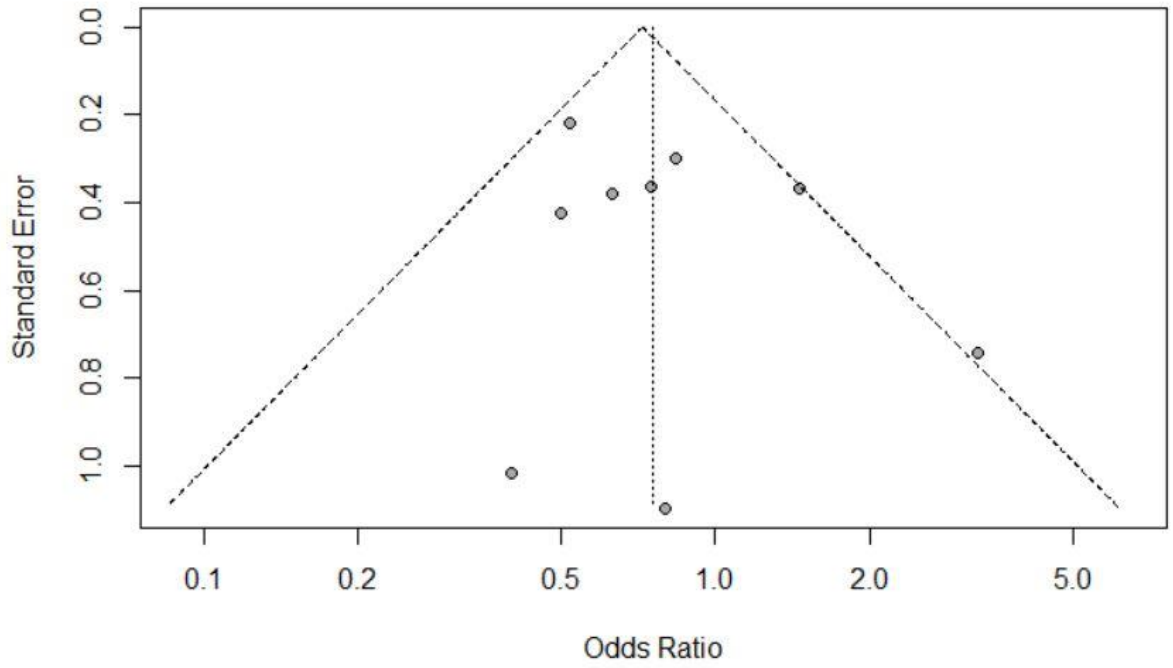

Figure 3. Funnel plot for readmission

Table 1. Description of included studies

Reference	Design	Country	Intervention	Intervention Components	Length of intervention (weeks)	Intervention intensity score	Comparison	Initial sample size: IG/CG	Diagnoses of participants		Follow-up
									psychosis / schizophrenia	depression / anxiety	
Bonsack et al. (28)	RCT	CH	Transitional Case management	CM, CBT	4	++	TAU	51 / 51	8%	75%	12 months
Dixon et al. (29)	RCT	US	Brief critical time intervention	PE, CM, CBT	12	+++	TAU	64 / 71	37%	NR	6 months
Forchuk et al. (30)	cRCT	CA	Transitional discharge model	CBT, PS	12	+++	TAU	201 / 189	48%	42%	12 months
Hanrahan et al. (31)	RCT	US	Transitional Care Model	PE, CM	12	++	TAU	20 / 20	73%*	75%*	3 months
Hengartner et al. (32)	RCT	CH	Post-Discharge Network Coordination Program	CM	12	++	TAU	76 / 75	27%	34%	18 months
Lay et al. (33)	RCT	CH	Psychoeducation and crisis focused monitoring	PE, CM, CBT	96	+++	TAU	119 / 119	39%	26%	24 months
Price et al. (34)	RCT	US	Transition to Community program	CM	2	+	TAU	7 / 6	100%		7 weeks

Reference	Design	Country	Intervention	Intervention Components	Length of intervention (weeks)	Intervention intensity score	Comparison	Initial sample size: IG/CG	Diagnoses of participants		Follow-up
									psychosis / schizophrenia	depression / anxiety	
Puschner et al. (35, 36)	RCT	D	Needs-oriented discharge planning and monitoring for high utilizers	CM	12	+	TAU	241 /250	59%	41%	18 months
Reynolds et al. (37)	RCT	UK	Transitional discharge model	CBT, PS	20	++	TAU	11 /14	NR	NR	5 months
Simpson et al. (38)	RCT	UK	Peer support for discharged patients	PS	4	+	TAU	20 / 22	52%	39%	3 months
Cuffel et al. (39)	QE	US	Group 1: Enhanced care management Group 2: intensive care management	CM	12	++	TAU	74** / 94*** / 31	20%	NR	6 months
Hegedüs et al. (40)	QE	CH	Short transitional intervention in psychiatry	CM, CBT	1	+	TAU	20 / 20	10%	59%	1 week
Khaleghparast et al. (41)	QE	IRN	Discharge planning	CM, CBT	12	++	TAU	23 / 23	100%		3 months
Batscha et al. (42)	Cohort study	US	Inpatient Transition Intervention by	CM	3	+	-	15	100%		2 weeks

Reference	Design	Country	Intervention	Intervention Components	Length of intervention (weeks)	Intervention intensity score	Comparison	Initial sample size: IG/CG	Diagnoses of participants		Follow-up
									psychosis / schizophrenia	depression / anxiety	
			APN transition coach								
Kidd et al. (43)	Cohort study	CA	Modified Welcome Basket intervention	CM, PS	4	++	-	23	87%	13%	1 month; 6 months readmission
Noda et al. (44)	Cohort study	JPN	Tokyo Musashino Hospital Psychiatric Rehabilitation Service	PE, CM, CBT	52	++	-	224	100%		2, 5, 7 years after discharge

RCT: randomized controlled trial; cRCT: cluster randomized controlled trial; QE: quasi-experimental design; CH: Switzerland; US: United States; CA: Canada; D: Germany; UK: United Kingdom; IRN: Iran; JPN: Japan; Intervention components: PE: psychoeducation, CM: case management, CBT: cognitive behavioral therapy, PS: peer support; TAU: treatment as usual; + low intensity, ++ moderate intensity, +++ high intensity; IG: intervention group; CG: control group; NR: not reported in publication; * multiple diagnoses possible; ** enhanced care management, *** intensive care management.

Table 2. Quality assessment of randomized controlled studies using the Revised Cochrane Risk-of-Bias tool for randomized trials (24)

Author	Domain 1: randomization process	Domain 2: deviations from intended interventions (assignment)	Domain 3: missing outcome data	Domain 4: measurement of outcome	Domain 5: selection of reported results	overall judgment
Bonsack et al. (28)	low	low	low	some concerns	low	some concerns
Dixon et al. (29)	low	low	low	low	some concerns	some concerns
Forchuk et al. (30)	low	some concerns	high	low	some concerns	high risk of bias
Hanrahan et al. (31)	low	low	low	some concerns	some concerns	some concerns
Hengartner et al. (32)	low	low	low	low	low	low risk of bias
Lay et al. (33)	low	some concerns	low	low	low	some concerns
Price et al. (34)	some concerns	high	low	low	some concerns	high risk of bias
Puschner et al. (35, 36)	low	low	some concerns	low	low	some concerns
Reynolds et al. (37)	some concerns	some concerns	some concerns	some concerns	some concerns	high risk of bias
Simpson et al. (38)	low	some concerns	some concerns	some concerns	some concerns	high risk of bias

Table 3. Quality assessment of non-randomized studies using the Mixed Methods Appraisal Tool (24)

Quasi-experimental studies	**3.1. Are the participants representative of the target population?**	**3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?**	**3.3. Are there complete outcome data?**	**3.4. Are the confounders accounted for in the design and analysis?**	**3.5. During the study period, is the intervention administered (or exposure occurred) as intended?**
Cuffel et al. (39)	yes	yes	cannot tell	no	yes
Hegedüs et al. (40)	yes	yes	no	yes	yes
Khaleghparast et al. (41)	yes	yes	yes	no	cannot tell
Cohort Studies					
Batscha et al. (42)	yes	yes	yes	yes	yes
Kidd et al. (43)	yes	yes	no	no	yes
Noda et al. (44)	yes	yes	yes	no	yes

Table 4. Overview of study results

	readmission	service use, inpatient	service use, outpatient	Symptoms	Quality of life	continuity of care	costs	functioning	Satisfaction	hopelessness	loneliness	depression	needs	subjective distress	social support & engagement in community	illness severity	coping	knowledge	difficulty faced after discharge	difficulty of discharge process
RCT																				
Bonsack et al. (28)	=		=																	
Dixon et al. (29)	=	=	(+)	=	=	+			=											
Forchuk et al. (30)	=				=		=													
Hanrahan et al. (31)	=	=			(=)	(=)														
Hengartner et al. (32)	=	=			=			+						-	=	=				
Lay et al. (33)	(+)*	(+)*																		
Price et al. (34)		=				=														
Puschner et al. (35, 36)	=	=	=	=	=		=					=	=							
Reynolds et al. (37)	=			=	=			=												
Simpson et al. (38)	=				=		=			=	=									
Quasi-experimental studies																				
Cuffel et al. (39)	=	=	(=)			=														
Hegedüs et al. (40)	=		=														=		=	=
Khaleghparast et al. (41)	+			+														+		

	readmission	service use, inpatient	service use, outpatient	Symptoms	Quality of life	continuity of care	costs	functioning	Satisfaction	hopelessness	loneliness	depression	needs	subjective distress	social support & engagement in community	illness severity	coping	knowledge	difficulty faced after discharge	difficulty of discharge process
Cohort studies																				
Batscha et al. (42)						=														
Kidd et al. (43)	=			=	(+)			+							+					
Noda et al. (44)	+																			

RCT: randomized controlled trial; + significant difference in favor of intervention; = no difference between groups; - significant difference in favor of control; () different measures of domain and results do not coincide; * significant reduction of compulsory readmissions, no change in voluntary admissions.

Table 5. Subgroup analysis

	Odds ratio	95% confidence interval
Duration of the intervention		
12 weeks or less (k=7)	0.778	0.508 – 1.191
13 weeks or more (k=2)	0.790	0.449 – 1.389
Risk of bias		
Low risk (k=1)	1.462	0.713 – 2.995
Some concerns (k=5)	0.735	0.444 – 1.216
High risk (k=3)	0.612	0.315 – 1.189
Intervention intensity		
Low (k=2)	0.528	0.347 – 0.803
Moderate (k=5)	0.898	0.460 – 1.753
High (k=2)	0.802	0.509 – 1.261

5.3 Peer support worker training: Results of the evaluation of the Experienced Involvement training program in Switzerland and Germany

Hegedüs, A., Burr, C., Pfluger, V., Sieg, D., Nienaber, A. & Schulz, M. (2020b). Peer support worker training: Results of the evaluation of the Experienced Involvement training program in Switzerland and Germany. Intern*ational journal of mental health nursing.* doi:10.1111/inm.12805

Abstract

Purpose: The ‘Experienced Involvement’ (EX-IN) training program prepares and certifies individuals who have experienced mental health problems to work as peer support workers and to support others challenged by similar conditions. We aimed to assess the impact of the EX-IN training on hope, self-efficacy, introspection, stigma resistance, personal recovery, health-related quality of life and employment in participants.

Methods: Data was collected using standardized assessment instruments before the training started (t1) and upon course completion (t2). Data from 103 participants who participated in both measurement times were included into data analysis.

Results: Participants significantly improved their recovery, stigma resistance, and introspection during the EX-IN training. In addition, a significant higher proportion of participants were employed at t2. Participants whose last inpatient stay was 0-1 year before the start of the EX-IN training showed significant lower levels of stigma resistance, and self-efficacy at t1 than participants with two or more years since the last inpatient stay. There were no significant changes in mean values over time, as well as in the mean values at t2 between the two groups.

Conclusions: EX-IN training has a positive influence on the handling of stigma, on one's recovery path and introspection. This indicates that EX-IN training has a therapeutic effect on the participants. EX-IN training seems to meet the challenges of peer support work. Therefore, the training can be recommended as preparation for working as a peer support worker as well as an intervention to improve one´s recovery-process.

Introduction

As part of recommendations in guidelines and position papers related to recovery orientation of mental health services [1,2] peer support increasingly attracts attention. As a result, the emphasis on peer support is actively growing in practice and research, especially in German-speaking countries of Europe [3]. Peer support workers (PSW) are individuals with lived experience of mental health problems and of service use who utilize their acquired knowledge and skills to support others challenged by similar conditions [4]. Peer support values include: hope and recovery, self-determination, empathetic and equal relationships, dignity, respect and social inclusion, integrity, authenticity and trust, health and wellness, lifelong learning, and personal growth [5]. Existing findings provide evidence that peer support represents a promising approach to improve patient orientation and quality of care in mental health services and might affect not only service users but also PSWs and mental health service delivery [6]. Even if the body of research on the effectiveness of PSW is currently small, existing studies show positive effects on service users, mainly concerning health-related outcomes such as hope, recovery, quality of live and empowerment [7-9].

One of the propulsive forces during the work as a PSW is the wish for normalization and self-preservation [10]. In their work, PSWs might experience personal improvements as well as challenging situations. Findings indicate positive effects on PSW's themselves, such as increased confidence at work, self-esteem, as well as improvements in their social networks, mental illness management and general health, e.g. through an increased understanding and awareness of mental health condition, increased self-care behavior and improved clinical status [11-13]. Additionally, PSWs reported advancement in their own recovery process [12], which is characterized by connectedness, hope, and optimism about the future, identity, meaning in life, and empowerment [14]. Moreover, peer support work can be seen as a stepping stone into employment [13,15,11].

However, challenging aspects of PSW were also reported and are characterized by confronting expectations, a feeling to be in need and unclear role definitions [16,15,17,18]. Furthermore, the perception of a power imbalance between doctors and patients or PSWs [16], rejected attitudes from non-peer stuff and the challenge of being treated as a patient rather than a colleague [13,18] are described. Some mental health professionals even consider that PSWs are placing their mental health at risk [19] and that stable mental health conditions are required to be able to provide good work [20].

In order to be ready to actually face these challenges and to perform a fulfilling job, PSWs wish to acquire self-care skills and knowledge on how to constructively approach peers and health professionals [10,17]. These expectations are closely linked to their drive to help peers, their desire for meaningful participation, and their urge for self-preservation [10]. In order to be prepared for their tasks and to anticipate possible challenges, PSWs wish to have specific training programs that meet professional standards [21,17]. There are recommendations to offer and run such training [22,5]. Experiences from Ontario, Canada, show that especially in rural areas, it is important to establish a minimum standard of PSW training [23]. The Ontario Peer Development Initiative provides such solid foundational training for PSWs [24]. In order to further accelerate peer support, the US and Canada, developed certifications for PSW [25,26]. Training is even obligatory in order to be certified and, in the US, to being able to reimburse through Medicaid, a government insurance program for persons whose income and resources are insufficient to pay for health care [25].

However there is no international agreement on their contents and extent or an internationally recommended well standing PSW training program are missing. Across Europe including Switzerland, Germany and Austria, the standardized Experienced Involvement (EX-IN) training has been established. However, potential training effects on participants and how participant characteristics (e.g. the time distance between the last psychiatric hospitalization and the start of PSW training) might affect training outcomes have not been examined yet. As a result, it is unclear whether EX-IN training improves participants' employment and relevant aspects for PSW like self-efficacy, hope, personal recovery, or health-related quality of life.

EX-IN training

The curriculum of the program was developed through a cooperative process between service users, mental health professionals, researchers, and trainers in six European countries and was funded by the Leonardo da Vinci program [27]. The EX-IN training attempts to enable potential PSWs to gain a collective experience of mental illness and recovery by reflecting personal experiences and the experiences of their colleagues. The training program is aimed at increasing their involvement in mental health services, improving their employability, strengthening their competencies to promote recovery and applying their collective experience in supporting others with mental health problems [28,27]. Upon completion, participants are eligible to work as PSWs in mental health services.

Persons, who are interested in the training, apply with a written CV and motivation letter. Participants are selected by a PSW and health professional after an assessment interview. They have a stable mental health, are able to reflect on their experiences and have at least one important, supportive person in their lives.

The training lasts 1.5 years and includes coursework and two practical training. Coursework classes comprise an introduction day and ten three-day sessions that are held monthly. These sessions cover the following ten modules: (1) promoting health and well-being; (2) trialogue; (3) empowerment in theory and practice; (4) experience and participation; (5) perspectives and experiences of recovery; (6) independent peer advocacy; (7) self-exploration; (8) recovery-based assessment and planning for people in crisis; (9) peer support; and (10) teaching (200 hours in total). Additionally, participants perform two practical training of 40 and 150 hours (80 hours in Germany) respectively in the field. Given the content mentioned above, the EX-IN training is in line with the suggestions of Moran et al. [17], namely to focus PSW training on peer competencies, interpersonal and helping skills, and PSW label and identity.

The EX-IN training program in the German-speaking parts of Europe is offered by different providers [29-32]. In Switzerland, EX-IN training is offered regularly since 2010. All training of all providers in Switzerland and of one in Germany are evaluated using the same methods. Course evaluations provide the opportunity to identify changes in participants' outcomes that are relevant for the work as PSW. Thus, on the basis of the aims of the EX-IN training, the benefits of peer support and according to the peer support values [5] and the five core aspects of personal recovery [14], we selected recovery in general, hope, introspection, stigma resistance, health-related quality of life and self-efficacy as outcome measures of the evaluation. Our study aimed to assess the influence of the EX-IN training on participants' hope, self-efficacy, introspection, stigma resistance, personal recovery, health-related quality of life and working situation. Besides, we aimed to identify how the time distance between the last inpatient stay and the start of the training affects the outcome variables described above.

Materials and Methods

Study Design

For this study, we used a pre-post-test design. To evaluate the EX-IN training programs, quantitative and qualitative methods were used. Qualitative results were published before [15], and are therefore not a subject of this paper.

Participants

All participants of the EX-IN training programs in Switzerland (8 training between 2010 and 2016) and in Germany (one training in 2016) were eligible for inclusion in the study.

Data Collection

On the first day of the training, all participants were briefly informed and received an information letter including an informed-consent form and the questionnaires. Written informed consent was obtained from all participants enrolled in the training. In order to guarantee anonymization, informed-consent forms were returned separately from the completed questionnaires. Data were collected at three different time points: before the training started (t1) and 16 months later, upon course completion (t2) and for single training one year after completion (t3). This article refers to the results of t1 and t2 and therefore includes cross-sectional as well as longitudinal data.

Measures

Sociodemographic information including gender, age, education, living, and employment status health-related characteristics (the type of diagnosis, age at onset, and year of the last psychiatric hospitalization, number of psychiatric hospitalizations) and previous experience as PSW were assessed by corresponding questions.

To assess introspection, self-efficacy, and hope, we used the corresponding subscales of the Questionnaire to Assess Resources and Self-Management Skills (FERUS [in German] [33]). The FERUS is a reliable and valid instrument and the subscales has demonstrated good internal consistency (Cronbach's α: introspection: .87; self-efficacy: .91; hope .91), factorial homogeneity and good test-retest reliability (Pearson's correlations: introspection: r = .78; self-efficacy: r = .69; hope: r = .77). Maximum score of the subscale introspection is 35, for self-efficacy it is 45 and for hope 50 and higher scores indicate better outcomes.

In order to assess Stigma resistance, we used the Internalized Stigma of Mental Illness Inventory (ISMI), designed to measure the subjective experience of stigma [34]. The German version of the ISMI showed high internal consistency (Cronbach's α: .73) and test-retest reliability (r = .69) [34]. The maximum score of this scale is 20 and a higher score indicates a higher resistance against stigma.

Health-related quality of life was assessed with the Short Form (SF)-12, the short version of the SF-36 Health Survey designed to reproduce Physical Component Summary (physical health) and Mental Component Summary (mental health) scores

[35-37]. The maximum score for both subscales is 100 and higher scores indicate better outcomes.

Personal recovery was measured with the German Version of the Recovery Assessment Scale (RAS) [38,39]. The RAS is a frequently used instrument to assess the personal recovery from a service users point of view [40]. The twenty-four items are rated on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). The maximum score is 120 and a higher score indicates higher recovery.

Data Analysis

In order to be able to evaluate pairwise, only data from participants who participated in both measurement times were included for further data analysis. All datasets were merged into one dataset. Missing values were imputed by the mean of the corresponding scale [41]. Data were analyzed using IBM SPSS Statistics for Macintosh version 25. For descriptive statistics, we calculated absolute (n) and relative (%) values. In order to identify relevant differences in the outcome variables either between groups or over time (t1 to t2), t-tests for paired samples were conducted. To calculate changes over time for dependent categorical dichotomous variables, the McNemar χ^2 test was used. To examine whether the closeness of the last inpatient stay, as a probable indicator of acuity of mental health problems, has a significant influence on the outcome variables, the sample was split into two groups (time to the last inpatient stay: up to one year ago vs. ≥ two years ago).

Ethical considerations

The evaluation of the EX-IN training was part of quality assurance measures. We obtained information regarding the need for ethical vote previous to training evaluations from the ethical commission. Our research did not fall under the category of the Swiss Human Research Act [42] since we evaluated an educational program. The ethical principles, according to the Declaration of Helsinki, were respected.

Results

Over 186 participants started one of the nine training included in our study. One hundred forty-five of them took part in the t1 survey (78.0%). One hundred forty-four finished the training, and of those, 107 participated in the t2 evaluation (74.3%). One hundred three participants took part in both time points. This represents our data set for further analysis.

Participant's description before starting the PSW training

The mean age of the participants (N = 103) at t1 was 44.3 years. Two third (67.6%) of the participants were female. Approximately half of the participants (47.6%) stated to live alone. 48% completed vocational training and 16.7% a university degree. 28.2% stated to be employed or self-employed and 34% to have had experience in PSW before starting the training. The most frequently reported primary diagnoses according to the ICD-10 classification [43] were Mood Disorders (F3; 42.2%). In mean participants reported having two diagnoses (Range 1 - 6). The last inpatient stay was in mean 4.34 years before the start of the EX-IN training (more details see Table 1).

((Table 1))

Variability of personal recovery, hope, introspection, stigma resistance, self-efficacy, and health-related quality of life over time

Table 2 shows mean sum scores of all outcome variables at t1 and t2. With the exception of mental health related quality of life, all outcome variables increased during the training. The increase of the following three outcome measure was statistically significant: personal recovery (t = - 3.73; df = 88; p = ≤ .000); stigma resistance (t = -3.54; df = 87; p = .001), and introspection (t = 1.99; df = 100; p = .049).

((Table 2))

Changes in employment status and income

Compared to t1 (n = 23, 31.9%), a significant higher proportion of participants were employed at t2 (n = 36, 50.0%) right after having completed the EX-IN training (χ^2 (1, N = 72) = 5.760, p = .015, odds ratio = 3.2). The proportion of participants having their main income from any employment did not change significantly between t1 and t2 (χ^2 (1, N = 70) = 0.364, p = .549). At t1, 5 participants had an income as PSW. At t2, this number slightly increased to 8.

Impact of the time distance of the last inpatient treatment on participants´ outcomes

Participants whose last inpatient stay was 0-1 year before the start of the EX-IN training showed significant lower mean values in stigma resistance (t = -2.365*; df* = 79*; p* = .020), and self-efficacy (t = -2.202; *df = 87; p* = .030) at t1 than participants with two

or more years since the last inpatient stay. There were no significant changes in mean values over time, as well as in the mean values at t2 between the two groups (Table 3).

((Table 3))

Discussion

The results of our study indicate that EX-IN training has a positive effect on participants' recovery, stigma resistance, and introspection. In addition, our results show that EX-IN training contributes to an increased employment rate after completion. Despite lower levels of stigma resistance and self-efficacy at the beginning of the EX-IN training, participants with more recent psychiatric hospitalizations showed similar improvements in personal recovery, hope, introspection, stigma resistance, self-efficacy and health-related quality of life to participants whose hospitalization was longer time ago.

The results indicate that EX-IN training has a positive effect on the stigma resistance and introspection of the participants. Stigma resistance, defined as the experience of resisting or being unaffected by internalized stigma [44], has been linked to increased self-efficacy, hope, recovery attitudes, insight into one's illness, self-stigma, and quality of life [45]. Through the group setting and intensive examination of one's own experiences, EX-IN training enables participants to create a feeling of belonging to the group and to acquire different views on personal recovery. This knowledge gain contributes to an increased stigma resistance and introspection. As a result, affected individuals are better armed against stigmatizing incidents and might be better prepared for the power gap in psychiatry [16].

An essential and significant part of the training´s content focuses on different aspects of recovery. People who are well advanced in their recovery process may be able to deal with failure and manage challenges in a constructive way [46,14]. Our results indicate that EX-IN training has a therapeutic effect by promoting considerable personal growth and skills in terms of recovery, reflectiveness, and stigma management. These skills can be essential to manage one´s own mental health condition as well as to address the challenges of the work as PSW effectively [16,15,19,11]. Especially in the context of the critical views of professionals related to

PSWs´ stability and recovery [19], PSW training becomes inevitable in the implementation of peer support in mental health services.

Another important point to discuss is the impact of the training on the participants' employment and salary situation. This aspect is of great importance because employment and income have a direct influence on the feeling of normalization [10] and can be supportive for personal recovery [47]. Although our results showed improvements regarding the employment, the income situation of the participants did not change. In another study, however, we were able to show that such effects often occur a year after completion of EX-IN training [15]. Similarly, Salzer et al. [48] revealed an improvement of employment status after the PSW training by 28% of their study participants. However, employment does not always result in a reduction of public assistance payments. Receiving public assistance payments is related to the hours worked rather than to the length of employment [12]. The review by Walker et al. [13] showed that graduates of PSW courses often receive only low hourly wages and are only employed for a limited number of hours. This is also in line with findings from the German-speaking part of Switzerland, where mean workloads lay between 13 and 15 hours per week [15,49]. Through consistent presence on the unit, increased work-loads can facilitate the integration and consequently the acceptance of PSW in mental health teams [50].

Related to the topic of employment and working conditions, the question arises, if EX-IN training should be offered predominantly as a job qualification or a vocational rehabilitation intervention. In some German federal states, EX-IN training is funded by the authorities as a vocational rehabilitation intervention aiming to include the participants into the labor market. However, the EX-IN training has mainly therapeutic effects on the participants in terms of increased recovery and consequently may have an impact on quality of life in general. Therefore, we argue that EX-IN training should not be offered with the exclusive goal to return to the labor market and reduce public assistance payments. The training should rather be open for participants whose overriding goal is to improve their recovery and self-care skills. The decision to re-enter the labor market as PSW needs to be made by the participants without pressure from the authorities.

The last important result shows that a psychiatric hospitalization in the year before the start of the training did not influence the individual results of the course negatively. Participants with recent hospitalizations are significantly lower in the target parameters at the beginning of the course but improve in absolute terms compared to participants in a better condition. Our results therefore tend to refute the fears and claims from

professionals that PSW risk their own mental health [19] or should be in a stable phase or situation to do such training or work [20]. In addition, it disputes PSWs´ perception that, when returning to work after relapse, professionals consider PSWs unable to cope with the illness [51]. Our results can be seen as a first indicator, that a recent relapse or hospitalization might be no contraindication for PSW training. It might even be considered as an intervention with therapeutic effects for those with psychiatric hospitalizations within the last year. However, the question arises as to whether PSWs with a poor mental state are equally suitable for peer support work. For example, we need more evidence regarding the extent on how the mental state influences the handling of potential challenges.

Limitations

Some limitations should be considered when interpreting the results: Firstly, the design without a control group does not allow assuming causalities between participation and outcomes. So it is unclear if other factors influenced the results or if the results are an effect of the natural recovery process. Since, most of the participants lived in a stable situation over a more extended period before starting the training, it can be assumed that at least a part of the effect is related to the EX-IN training. Secondly, we only included data from participants who took part in both assessment time points. Regarding this, results can be overestimated due to attrition bias. The 22.5% drop-out rate during the training seems to be higher than in similar courses for professionals, even if we found no valid data.

Conclusions

Peer services in mental health are expanding and are an integral part of recovery-oriented system change. EX-IN training has a positive influence on participants´ recovery process, introspection and their handling of stigma. This indicates that EX-IN training has a therapeutic effect on the participants. EX-IN training seems to meet the challenges of peer support work as PSW and health professionals expressed it. Therefore, the training can be recommended as preparation for working as a PSW as well as an intervention to improve one´s recovery-process.

In order to better validate the effects of the training, studies with control groups should be performed. It could thus be shown to what extent the effects measured are a consequence of the training rather than a consequence of spontaneous remissions. Moreover, through the assessment of other outcome measures, such as self-care

competencies or health literacy, we could generate more profound evidence of its therapeutic effect and the training´s suitability as a therapeutic intervention.

It should also be examined how many participants of the EX-IN training work as PSWs in the first e.g. three years following training and what measures need to be taken to facilitate this step [3]. With regard to the field of work of PSW in psychiatric settings, the motivation of leaders to prioritize peer support, establish partnerships with peer support organizations and recruit PSWs should also be investigated in order to further accelerate peer support [52]. Studies with an extended observation periods and e.g. qualitative studies focusing on PSWs´ work environment are necessary to better understand mechanisms related to PSWs´ work situation and foster knowledge exchange. In addition, at present, we still know too little about the effects of peer support work in German and Swiss psychiatric institutions. Further research is needed to clarify those effects and assess the preconditions needed to offer effective peer support. This evidence could substantially improve PSW training and the provision of peer support work in mental health institutions.

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Table 1. Participants' sociodemographic description before the EX-IN[a] training (N = 103)

	n (%)	*Mean (SD)*	*Range*
Age	103	44.34 (8.89)	(26-66)
Gender			
Female	69 (67.6)		
Male	34 (32.4)		
Living status			
Living alone	47.6 (49)		
Living with partner or others	44.7 (46)		
Living only with Child/Children	7.8 (8)		
Highest education level			
Primary School	7 (6.9)		
Vocational training	49 (48.0)		
University Entrance Diploma	27 (26.5)		
University Degree	17 (16.7)		
Others	2 (2.0)		
Employment status (multiple responses)			
Employed	29 (28.2)		
Housekeeping	22 (22.9)		
Voluntary work	19 (19.8)		
Sheltered employment	13 (13.5)		
Job seeking	12 (12.5)		
Occasional work	8 (8.3)		
Experience as PSW[b]			
Participants with prior PSW experience	35 (34.0)		
ICD-10 Diagnoses (Self-reported)			
Mood disorders (F3)	43 (42.2)		
Disorders of adult personality and behaviour (F6)	18 (17.6)		
Schizophrenia, schizotypal and delusional disorder (F2)	18 (17.6)		
Neurotic, stress-related and somatoform disorders (F4)	14 (13.7)		
Psychological and behaviour disturbances by psychotropic substances (F1)	5 (4.9)		
Others	4 (3.9)		
Age first mental health treatment		26.1 (10.7)	(6-52)
Age first inpatient admission		29.8 (10.3)	(11-58)
Number of inpatient admissions		7.1 (8.2)	(0-50)
Years between last inpatient admission and training start		4.34 (4.6)	(0-20)

Note: [a] EX-IN Experienced-Involvement, [b] Peer Support Worker

Table 2. Changes of mean sum scores of standard measures over time

	n	*Mean (t_1)*	*Mean (t_2)*	*t*	*df*	*p*
Hope (FERUS)[a]	94	39.76	40.91	-1.756	93	.082
Self-Efficacy (FERUS)	95	32.12	33.23	-1.971	94	.052
Introspection (FERUS)	101	27.42	28.31	-1.997	100	**.049**
Stigma Resistance (ISMI)[b]	88	16.6	17.42	-3.548	87	**.001**
Personal Recovery (RAS)[c]	89	92.61	96.1	-3.73	88	**.000**
Physical Health (SF-12)[d]	88	47.66	48.97	-1.547	87	.125
Mental Health (SF-12)	88	45.49	45.09	0.36	87	.720

Note: *[a]FERUS Questionnaire to Assess Resources and Self-Management Skills; [b]ISMI Internalized Stigma of Mental Illness Inventory; [c]RAS Recovery Assessment Scale; [d]SF-12 Health Survey Short Form-12*

Table 3 Difference of mean-values of standard measures related to the last inpatient stay [a]

	t	*df*	*p*	*CI 95%*
Hope (FERUS)[b]	-1.019	84	.311	[-4.73; 1.53]
Self-Efficacy (FERUS)	-2.202	87	**.030**	[-5.90; -0.30]
Introspection (FERUS)	1.126	90	.263	[-0.75; 2.72]
Stigma Resistance (ISMI)[c]	-2.365	79	**.020**	[-2.28; -0.19]
Personal Recovery (RAS)[d]	-.777	78	.439	[-7.08; 3.10]
Mental Health (SF-12)[e]	-1.925	83	.058	[-10.67; 0.17]
Physical Health (SF-12)	-.323	83	.748	[-5.47; 3.94]

Note. [a] time since last inpatient stay 0-1 years vs. ≥ 2 years [b]FERUS Questionnaire to Assess Resources and Self-Management Skills; [c]ISMI Internalized Stigma of Mental Illness Inventory; [d]RAS Recovery Assessment Scale; [e]SF-12 Health Survey Short Form-12

6 Anhang

6.1 Eidesstattliche Erklärung

Ich erkläre an Eides statt, dass ich die Arbeit selbständig und ohne fremde Hilfe verfasst habe. Alle Regeln der guten wissenschaftlichen Praxis wurden eingehalten; es wurden keine anderen als die von mir angegebenen Quellen und Hilfsmittel benutzt und die den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen als solche kenntlich gemacht.

Bern, 18.04.2020

Anna Hegedüs

6.2 Erklärungen über frühere Promotionsversuche

Ich erkläre, dass ich mich an keiner anderen Hochschule einem Promotionsverfahren unterzogen bzw. eine Promotion begonnen habe. Ich erkläre, die Angaben wahrheitsgemäß gemacht und die wissenschaftliche Arbeit an keiner anderen wissenschaftlichen Einrichtung zur Erlangung eines akademischen Grades eingereicht zu haben.

Bern, 18.04.2020

Anna Hegedüs

6.3 Lebenslauf

Beruflicher Werdegang:

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01/2011 – 06/2011	Weiterbildung «Empowering Patient Education Course»; Department of Nursing Science, University of Turku (FIN)
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