Analysis of Housing First as a Practical and Policy Relevant Intervention: The Current State of Knowledge and Future Directions for Research

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Abstract_ Bond and his colleagues (2010) developed a set of criteria, known as “ideal features” for evaluating the practical and policy relevance of a mental health intervention. The paper reviews pertinent research to determine the extent that Housing First (HF) demonstrates these features. The conducted review of the literature found HF to be well-defined, reflecting client goals, consistent with societal goals, effective in ending homelessness, producing minimal negative effects, generating cost offsets, relatively easy to implement, and adaptable to different communities and clients subgroups. The sole ideal feature on which HF could not be evaluated involved the extent it produced enduring positive long-term outcomes. Based on the analyses, limitations of the research to date on HF are identified and future directions are proposed.

Keywords_ Homelessness, Housing First, Policy Relevance
Introduction

The objectives of the paper are threefold: (1) To provide an analysis of the Pathways Housing First (HF) model based on the framework of the Ideal Features of a Mental Health Intervention developed by Bond et al. (2010), (2) to discuss the limitations of the current research base on Pathways HF, and (3) to identify directions for future research on HF.

The Pathways HF model provides a structure and process on how housing and support services are provided to individuals exiting homelessness (Tsemberis, 2015). In particular, the HF approach assists people to move immediately into scattered site housing by providing them with rent assistance and intensive community support. The rent assistance is set so that individuals pay no more than 30% of their income for housing. The intensive support is delivered in the form of Assertive Community Treatment (ICM) or Intensive Case Management (ICM) (Tsemberis, 2015). The housing can be private market housing or social housing (Padgett et al., 2016).

Criteria of Ideal Mental Health Intervention

Bond et al. (2010) identified a comprehensive set of criteria for evaluating mental health interventions. Their criteria go beyond the reviews of research that examine the evidence of effectiveness and the rigour of the methods used to determine this effectiveness. The framework identifies what they call the “nine ideal features of a mental health intervention” for determining its practical and policy relevance. Table 1 presents these nine features.

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<th>Ideal Features of a Mental Health Intervention (Bond, Drake, &amp; Becker, 2010)</th>
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The Pathways HF approach will be assessed on these nine features based on the existing research and the analysis will be used to point out limitations and gaps in the research to date and to propose future research directions.

**Assessment of Pathways HF Relative to Ideal Features of Mental Health Interventions**

**Well-defined**

The first ideal feature specifies that a mental health intervention should be well defined. In other words, aspects such as programme structure, staffing, and service activities should be specified. Evidence of the presence of this feature is the existence of a programme manual that details the programme components. In the case of HF, Pathways has put out a manual describing in detail the make-up of the intervention (Tsemberis, 2015). In Europe, there is the HF Guide, available online, that sets out the core principles and presents existing knowledge for implementing HF in European contexts (FEANSTA, 2016). In Canada, a comprehensive toolkit has been developed based on the At Home / Chez Soi project that is available on the web (Macnaughton *et al.*, 2014).

In line with the programme being well-defined, the elements making up programme fidelity have been specified and fidelity measures exist for HF with ACT and HF with ICM (Stefancic *et al.*, 2013). The fidelity domains for HF are Housing Choice and Structure, Separation of Housing and Services, Service Philosophy, Service Array, and Programme Structure. A series of items describing the make-up each of these domains, specify the elements for achieving programme fidelity. Overall, it can be concluded that the programme model demonstrates the ideal feature of being well-defined.

**Reflects client goals**

A second ideal feature for a mental health programme in the framework of Bond and his colleagues (2010) is alignment of the goals of the programme with client goals. In the case of HF, the provision of individuals with choice around their housing and services is evidence of the presence of this feature. HF staff assist programme participants to engage in shared decision-making regarding finding housing and setting goals in the context of the support they receive from the programme.

Consumer surveys of people with serious mental illness, including those conducted with individuals who are homeless, over the past 25 years have consistently found that individuals with serious mental illness prefer living independently in regular housing. A recently published meta-analysis by Richter and Hoffman (2017), that
included studies with people who were homeless, found that 84% of individuals, if
given a choice, would select this option. It seems pretty clear that HF values and
principles, that emphasise client choice, are in line with client goals.

**Correspondence to societal goals**

A third ideal feature for a mental health intervention is having goals that correspond
to societal goals. There is certainly widespread consensus in North American and
European countries that ending chronic homelessness for people with complex
health needs is an important societal goal. In fact, it is a central reason why many
countries have introduced HF as a central part of their strategy to address home-
lessness (Pleace et al., 2019).

A recent development in Canada has been the release of a National Housing
Strategy by the federal government (Government of Canada, 2017). The strategy
commits to introducing legislation that will promote a human rights-based approach
to housing. Canada is late in adopting this legislation compared to some European
countries. The legislation would require the federal government to maintain a
strategy that prioritises the housing needs of those who are most vulnerable. The
adoption of a human-rights based approach to housing fits extremely well with a
HF approach and is indicative of HF goals being consistent with societal goals.

**Intervention is effective**

According to Bond and his colleagues (2010), a fourth ideal feature of a mental
health programme is the demonstration that it is effective. In the case of Housing
First, the North American evidence is unequivocal that it is effective in ending
homelessness for a majority of individuals who have experienced chronic home-
lessness (Aubry et al., 2015). Moreover, the large Canadian trial known as the At
Home / Chez Soi project found HF compared to usual services to be superior in
assisting individuals with serious mental illness to achieve housing stability. The
results were the same for individuals with moderate needs who were receiving ICM
or individuals with a high level of need who were receiving ACT (Stergiopoulos et
al., 2015; Aubry et al., 2016).

The four city French trial, known as Un Chez Soi d’Abord has had equally impres-
sive housing outcomes as reported in its final report with 85% of participants
receiving HF housed after 2 years compared to less than 40% of people receiving
TAU (Délégation interministérielle pour l’hébergement et l’accès au logement
[DIHAL, 2017]). Also there was a significantly greater reduction in hospitalisations
for HF participants compared to TAU participants as health services were delivered
to HF participants in their homes rather than in hospitals. This finding in the French
trial is in line with the trials conducted in the U.S. and Canada, with HF participants experiencing fewer hospitalisations and a greater reduction in emergency room visits compared to those receiving treatment as usual (Baxter et al., 2019).

However, the evidence of effectiveness on other outcomes is more ambiguous. Some studies have shown HF participants reporting greater improvements in subjective quality of life compared to individuals receiving treatment as usual (Gilmer et al., 2010; Patterson et al., 2013; Stergiopoulos et al., 2015; DIHAL, 2017; Aubry et al., 2019). The improvements tend to be in the areas of living situation, safety, finances, and leisure and the effects are small to moderate in size. However, the finding of HF yielding greater quality of life benefits than treatment as usual has not been consistent (Aubry et al., 2020). In terms of mental health, physical health, and substance use, there is no evidence to date showing HF to produce better outcomes compared to treatment that is available in the community.

Despite the lack of non-housing outcomes other than improvements in quality of life being shown in quantitative data, the At Home / Chez Soi study in Canada found that qualitative data showed evidence of a greater proportion of HF participants reporting positive life changes compared to participants receiving usual services (Nelson et al., 2015). In the study, 200 individuals (i.e., 100 from each group) participated in qualitative interviews at study entry and at an 18-month follow-up. The follow-up interview examined changes in 13 life domains that included social relationships, family relationships, leisure activities, housing, and finances.

Based on a blind coding of qualitative data, 60% HF participants were judged as reporting uniformly positive life changes in the different life domains over the period between the interviews compared to only 30% of participants receiving usual services (Nelson et al., 2015). Moreover, only about 10% of HF participants had uniformly negative life changes compared to 30% of TAU participants. Many of the HF participants described their participation in the project as transforming their lives. In contrast, many participants receiving usual services perceived themselves as making little progress toward recovery and described themselves as experiencing deterioration during the study. A plausible interpretation is that the qualitative data are more sensitive to finding changes compared to the quantitative data.

**Minimal or no negative effects**

A fifth ideal feature is for a mental health intervention to have minimal or no negative effects such that positive outcomes outweigh any negative outcomes. Based on the research to date, there is no evidence that HF produces major negative effects. One unintended negative consequence that shows up in qualitative interviews involves some recipients of HF reporting that they feel socially isolated (Stergiopoulos et al., 2014; Quilgars and Pleaface, 2016). Individuals are assisted to move into
housing and it results in a major change as they are no longer surrounded by others on the street or in shelters (Stergiopoulos et al., 2014). As a result, they find themselves spending a lot of time alone and they find this new situation difficult. Based on the qualitative interviews in the At Home / Choi study, it appeared that a minority of HF participants reported social isolation and loneliness (Nelson et al., 2015).

Although HF achieves superior housing outcomes in comparison to usual services, research has also shown that 12-25% of recipients of HF are not successful at becoming stably housed (Padgett et al., 2016). In the Canadian trial, 14% of participants were found to be unstably housed after the first year (i.e., housed less than 50% in the last nine months; Volk et al., 2016). A comparison of unstably housed HF participants to those stably housed found a small number of predictors of housing instability that included greater experience of homelessness, recent incarceration, and a higher level of community integration at study entry (Volk et al., 2016).

Severity of mental health symptoms, level of functioning in the community, and level of substance use were not significant predictors. The predictive model accounted for a small amount of variance (i.e., 8%) and was able to identify correctly only 4% of the unstably housed group (Volk et al., 2016). This research suggests that offering HF to individuals is required to determine if HF is a good fit for individual in terms of their ability to achieve housing stability.

Presence of long-term positive outcomes

Another ideal feature of a mental health intervention is that it produces enduring long-term positive outcomes. The programme logic model of Pathways HF programmes predicts recovery as a long-term positive outcome because of stabilisation in housing and receipt of appropriate health and social services (Aubry et al., 2015). Recovery includes achieving integration in the community, experiencing a satisfying quality of life in different life domains, and having improved functioning. Research on the longer-term effectiveness of HF is lacking.

A recently published study examined the outcomes of HF participants compared to the participants receiving usual services over a six-year period at the Toronto site of the Canadian multi-site trial (Stergiopoulos et al., 2019). Findings showed HF participants with high support needs spending 86% of their time in stable housing after six years and HF participants with moderate needs spending 88% of their time stably housed. Both groups showed superior levels of housing stability compared to individuals receiving treatment as usual at all time points. The rate ratio of days stably housed for individuals with high support needs was 1.43 (i.e., 86% for HF participants versus 60% for treatment as usual participants). The rate ratio of days stably housed for individuals with moderate support needs was 1.13 (88% for HF participants versus 78% for treatment as usual participants).
However, there were no differences in improvements in quality of life, community functioning, or substance abuse severity between HF recipients and individuals receiving treatment as usual over the six years (Stergiopoulos et al., 2019). The researchers speculated that the lack of differences between the groups on these variables might be the result of participants’ chronic poor health, continued poverty, and lack of access to high quality health services. They also suggested that the housing and health services available to treatment as usual participants in a resource rich city like Toronto might have also contributed to the lack of differences between the groups.

**Programme incurs reasonable costs**

A seventh ideal feature is that the programme incurs reasonable cost. To date, there has been a small number of published studies on cost benefits and cost-effectiveness conducted on HF (Ly and Latimer, 2015; Aubry et al., 2017). All of these studies were located in the U.S. and Canada. Research that has been conducted using a comprehensive costing methodology, suggests that the costs of HF programmes are at least partially offset by a reduction in health care, social services, and involvement in the justice system (Rosenheck et al., 2003; Aubry et al., 2017; Latimer et al., 2019; Latimer et al., 2020).

In the Canadian trial, 46% of the cost of delivering HF with ICM to people with a moderate level of need (€10,100) was offset by the reduction in emergency shelter use, substance use treatment, and supportive housing (Latimer et al., 2019). A cost-effectiveness analysis determined that each additional day of stable housing for the HF participants cost €39. In contrast, 69% of the cost of delivering HF with ACT to people with a high level of need (€13,953) was offset by reduced use of emergency shelters, substance use treatment, supportive housing, ambulatory visits, and incarcerations. As a result, the cost of each additional day of stable housing was estimated to cost €29 (Latimer et al., 2020). Costs here are presented in 2016 values and have been converted from Canadian dollars to Euros.

One of the reasons for HF programmes only achieving partial cost offsets is the nature of the distribution across individuals when it comes to costs associated with their service use. In a study of costs associated with individuals who are homeless receiving usual services in the Canadian trial, a broad distribution of total cost of service use was found ranging from – €10,452 at the low end reflecting contributions through income exceeding service costs to €243,880 at the top end (Latimer et al., 2017). It is clear that cost savings will be maximised in the case of individuals who are the heaviest users of services. On the other hand, the lower end users of services will end up costing more. Hence, the achievement of only partial cost offsets.
**Programme is easy to implement**

A recent study examined the level of fidelity of Housing First programmes in nine countries in Europe and North America (Aubry et al., 2018). Using a validated self-assessment measure of fidelity with staff in these programmes, the study found the programmes having moderate to high levels of fidelity. On a 4-point scale with higher scores reflecting higher levels of fidelity, the total fidelity score across all 10 programmes averaged 3.5 (Greenwood et al., 2018).

The two areas of lowest fidelity were service array (i.e., meaning the extent programmes helped clients access a wide range of health and social services) and programme structure (i.e., referring to programme characteristics like frequency of contact with participants, participant / staff ratio, frequency of team meetings) (Greenwood et al., 2018). These two areas had an average of 3.2 on the 4-point scale. The areas assessed as having the highest levels of fidelity were separation of housing and services (e.g., requirements to qualify for housing, provisions in lease agreement; effect of housing loss on support services; M = 3.9) and programme philosophy (i.e., values guiding services; M = 3.7).

Overall, these domain scores and total scores are very similar to those achieved by the programmes in the Canadian trial (Macnaughton et al., 2015). The achievement of this level of fidelity across all of these programmes in very different contexts, with different capacity, and different levels of access to training and technical support suggest that HF can be implemented in a relatively consistent manner.

As part of the multi-country study, programme staff were interviewed or participated in a focus group in order to identify factors that facilitated and impeded achieving a high level of fidelity. The most frequent mentioned facilitators by the 10 programmes were agency commitment to HF values (N = 8), availability and partnership with community services (N = 8), and landlord’s cooperation and supportive attitudes towards having HF clients as tenants (N = 5). On the other hand, the most frequently identified obstacles to fidelity were the lack of availability of housing and the high cost of rental market (N = 8), lack of training and supervision of support staff (N = 8), and limited funding (N = 7).

**Adaptable to diverse communities and subgroups**

The final ideal feature is that an intervention can be adapted to diverse communities and client subgroups. Research to date shows that HF demonstrates this feature in that it has been implemented successfully throughout Europe and North America (Greenwood et al., 2018; Pleace et al., 2019). The housing outcomes achieved in different countries for HF recipients appear to very similar (Padgett et al., 2016).

As well, findings from the Canadian trial on different subgroups showed HF achieving similar housing outcomes that were superior to treatment as usual for
youth (Kozloff et al., 2016) and older adults (Chung et al., 2017). In the trial, HF has also been adapted successfully for Indigenous clients (Distasio et al., 2014) and ethnic minority groups in Toronto (Stergiopoulos et al., 2016). Other research has been conducted on HF with people with severe addictions (Cherner et al., 2017) and with rural populations in Vermont (Stefanic et al., 2013).

**Limitations of Research on HF**

There are some limitations to the research conducted to date:

1. There is a wide range of HF programmes that have been studied and the differences between them have not been documented. This complicates the interpretation when studies report different outcomes.

2. Related, the assessment of fidelity of HF programmes is relatively new and absent in many studies.

3. It is frequently unclear what makes up usual services or standard care in HF studies. As a result, it is difficult to compare the results of different studies.

4. There has been a narrow range of health outcomes examined in studies with a heavy focus on housing outcomes.

5. There is a lack of qualitative research on the changes experienced by HF recipients who are housed.

6. The period of follow-up for most studies on HF is 24 months or less. As a result, the longer-term trajectory for HF participants in terms of experiencing health and social outcomes including recovery is unknown.

7. The small number of economic studies make it difficult to draw conclusions about cost offsets and cost-effectiveness associated with HF.

**Future Research Directions**

The following future directions for research would address the limitations of HF studies to date:

1. Given the lack of health outcomes being produced by HF programmes, research needs to examine the effectiveness of enriched and more targeted forms of evidence-based community support that can be integrated into HF programmes like Strengths-Based Case Management, Integrated Dual Diagnosis Treatment, and Individual Placement and Support.
2. The ideal feature lacking in HF research is evidence of its long-term effectiveness. There is clearly a need for studies of a longer duration.

3. More research focusing on the relationship between programme fidelity and outcomes is needed.

4. There remains 10-20% recipients of HF who fail to achieve housing stability. Research clarifying their personal characteristics and the situational characteristics contributing to this non-responsiveness is needed.

5. More cost-benefit and cost-effectiveness research is needed to understand the economics of HF in different contexts.

6. As much as possible, qualitative methods should also be used in outcome studies to more fully understand the positive and negative changes experienced by HF recipients in an in-depth manner.

7. Finally, there is a need to compare the effectiveness HF combined with different types of support (e.g., HF + ICM versus HF + ACT).

Conclusions

Overall, based on the research findings to date, HF demonstrates most of the ideal features of a mental health intervention as defined by Bond and his colleagues (2010). As presented in this paper, the presence of these ideal features is an important reason for its dissemination internationally.

The one feature on which data is lacking is evidence of long-term outcomes other than recent findings of the Toronto site in the Canadian trial (Stergiopoulos et al., 2019). As well, some HF tenants experience social isolation and there are a small subgroup of HF recipients, who are unsuccessful at achieving housing stability (Padgett et al., 2016).

Finally, it is clear that HF demonstrates a large effect on housing outcomes when compared to treatment as usual services or standard care in communities (Baxter et al., 2019). However, for the most part, it has not demonstrated greater effectiveness than usual services in improving health and social outcomes other than self-reported quality of life (Aubry et al., 2020).
> References


