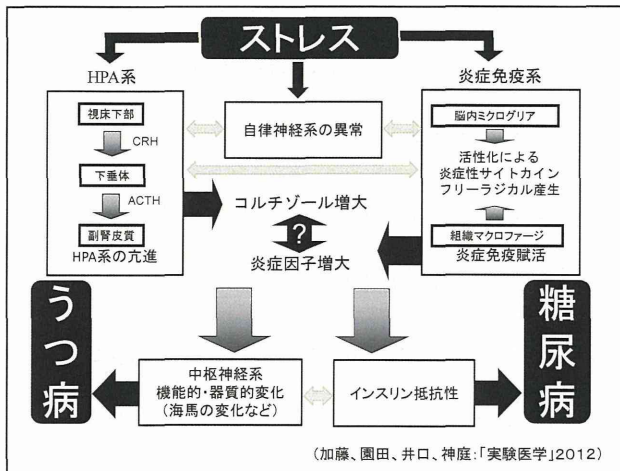


うつ病と身体疾患との関係

身体疾患におけるうつ病の有病率

身体疾患	有病率%
がん	20-38
慢性疲労症候群	17-46
慢性疼痛	21-32
冠動脈疾患	16-19
クッシング症候群	67
痴呆	11-40
糖尿病	24
てんかん	55
血液透析	6.5
HIV感染	30
ハンチントン病	41
甲状腺機能亢進症	31
多発性硬化症	6-57
パーキンソン病	28-51
脳卒中	27

Wise MG et al: American Psychiatric Press, Washington



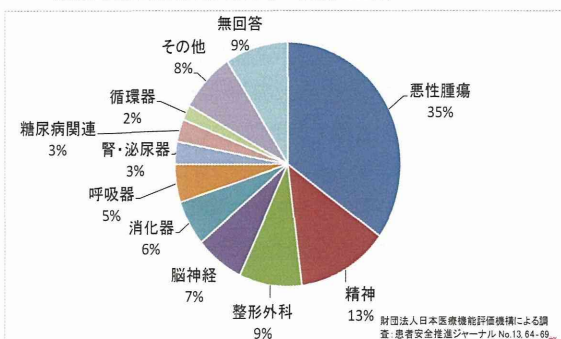
身体疾患患者と一般人口における自殺の危険の比較

診断	一般人口との比較(倍)
慢性腎不全	
人工透析	14.5
腎移植	3.8
がん	
頭頸部	11.4
その他の部位	1.8
HIV陽性、エイズ	6.6
SLE	4.3
脊髄損傷	3.8
ハンチントン病	2.9
多発性硬化症	2.4
消化性潰瘍	2.1

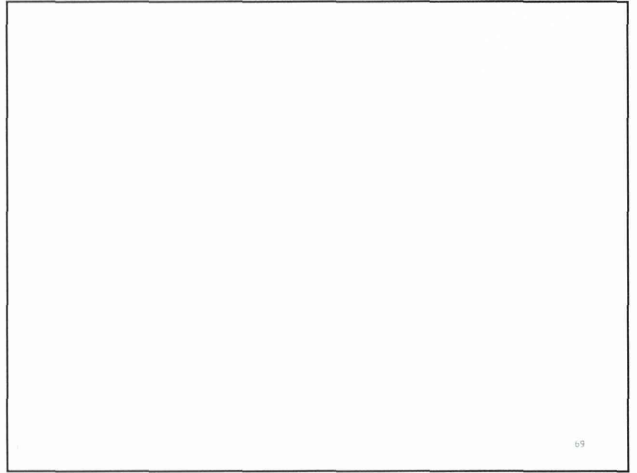
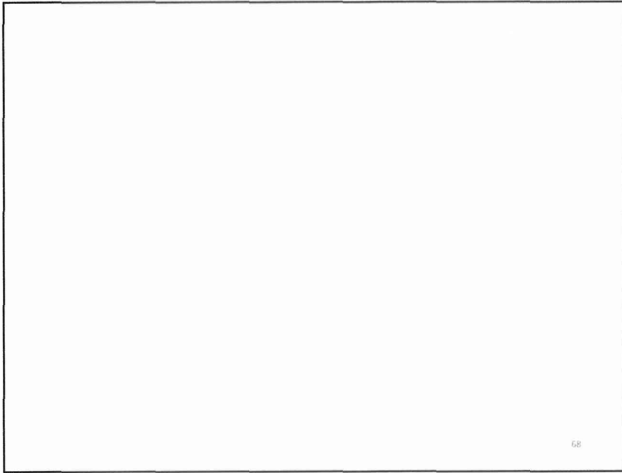
Harris EC, et al: Suicide as an outcome for medical disorders. Medicine 73: 281-196, 1994

自殺事故(一般病院・総合病院)

対象 575の一般病院・総合病院
過去3年間の院内自殺 29% (117病院, 347件)




DVD視聴




講義3
**メンタルヘルス・ファーストエイドの
具体的な5ステップ**


- 1) 自殺に傾いている人の心理状態
- 2) 自殺のサイン
- 3) メンタルヘルス・ファーストエイド5ステップに
基づく介入法
(今回は、特に「うつ病のメンタルヘルス・ファーストエイドを中心に！)




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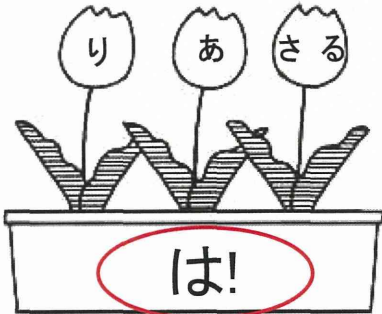
 **メンタルヘルス・ファーストエイドの5原則**

1. リスク評価
2. 決めつけず、批判せずにはなしを聞く
3. あんしん、情報を与える
4. さポートを得るよう勧める
5. るせるふへるぶ



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メンタルヘルス・ファーストエイドの使い方

「り・は・あ・さ・る」は重要な順になっていますが、
リスクのチェックは相手との関係性が十分にでき
てからでないと上手くいかないことも多いため、
実際のコミュニケーションでは
「は・あ・さ・る」を先に実践して、
十分な関係性ができたところで尋ねること

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リスク評価

～自傷・他害のリスクをチェックしましょう～

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どんな時に自殺を疑う？

- + 消えてしまいたい、死にたいなどと言う
- + 身の周りの整理をする
- + 持ち物(財産など)を手放す
- + 外見や行動の急激な変化(良し悪しを問わず)
- + 自分のことを含めずに将来の計画を立てる
- + 自分の中にひきこもる
- + 遺書を書いたり、自殺の意図をほのめかす

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The SAD PERSONS : 自殺の危険度チェックリスト

- Sex(性別)**: 男性の方が女性の約2.5倍自殺率が高い(日本の場合)
- Age(年齢)**: リスクの高い年代がある
- Depression(うつ病)**: うつ病は有意にリスクが高い
- Previous attempt(自殺企図の既往)**: 過去に自殺しようとしたことがある人は将来再び自殺しようとする可能性が高い
- Ethanol abuse(アルコール)**: アルコール乱用は極めて自殺につながりやすい
- Rational thinking loss(合理的思考の欠如)**: 精神病状態にある人はリスクが高い
- Social support deficit(社会的援助の欠如)**: 利用できる社会資源が少ないとリスクが高い
- Organized plan(組織的な計画)**: 自殺を計画している人はリスクが高い
- No spouse(配偶者がいない)**: 配偶者や恋人がいない人はリスクが高い
- Sickness(病気)**: 慢性の身体疾患を抱えている人は自殺につながりやすい

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してはいけないこと

- + ショックを受けた様子や不快感を相手にあらわにするようなことは避けましょう。
- + その人の感情を過少評価したり、はらいのけてはいけません。
- + その人の死にたい動機を分析してはいけません。
例)「死にたいと思うのは、こういうことだからですね。」

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してはいけないこと

- + 「あなたが死ぬことなんかありません」などと議論したり、諭したりしてはいけません。
- + 自殺を避けるために、冷やかしたり、罪悪感を持ちだしてはいけません。
- + 自殺について秘密を作ってはいけません！必ず誰かに入ってもらい、(支援者が)一人で抱え込まないこと。
※公務員、医師等の職種であっても、自殺に関しては守秘義務はあてはまりません。

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すべきこと

しかし、とても難しいことです。

【前提として…】

- + 自殺に関するコミュニケーションはどんなことでも真剣にとらえましょう。

【リスク評価】

- + 自殺について、直接的に尋ねましょう。
-「死にたいと思っているの?」「具体的に何か考えているの?」
- + どのように感じているのか、気持ちを聞きましょう。
- + 自殺の計画について聞きましょう。
-いつ、どこで、どのように
-「なぜ」は判断が入り込むので聞かない。
- + 過去にも自殺について考えたことがあるか聞きましょう。

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すべきこと

しかし、とても難しいことです。

【その他】

- **事態は改善することを伝えましょう。**
 - 病院でしばらく治療をすれば、カウンセリングも薬もあって、今よりも必ずよくなる時がある
 - ・ 死にたい気持ちがずっと続くことは少ない。極期さえ乗り切れば楽になります
 - ・ 表面的な「大丈夫」では、自分のつらさをわかってもらえていないと思うかもしれない
- **その人の支えになってくれる人・傍にいてあげる人を見つけましょう。**

<大切なこと>
何よりも、自分の安全を優先しましょう。
決して一人で無理はせず、他の人や警察・救急の助けを求めましょう。

自殺行動のファーストエイド

～自殺の危機が差し迫った人を救うには～

- 落ち込んで切迫している人には、むやみに身体接触してはいけません。
- 絶対にひとりにしないこと
 - 自殺のリスクが高いと判断するならば必ずそばにいて、もしくは、直近の危機的状況が過ぎるまでは必ず誰かがそばにいて
- 救急に助けを求めましょう。
 - 緊急連絡先に電話をかける
 - 怪我をしていれば119番、自殺企図が切迫していれば110番する
 - 救急外来につれていく
 - 精神科・神経科・心療内科へつれていく
(近くにない場合は、なんらかの医療機関に行く)
- お酒や違法薬物を使っているなら、やめるよう話しましょう。

自殺行動のファーストエイド

～自殺の危機が差し迫った人を救うには～

- 自殺の手段となるような物を遠ざけて、身近に置かないようにしましょう
- 落ち着いて話せる環境をつくりましょう
 - 良いとか悪いとか言わずに話を聞きましょう。誠実に、敬意を持って、相手の感情を否定せずに対応しましょう。無理にアドバイスをしようとするのはいいことです
- その人に、この事態はいつまでも続かない、いずれは好転するであろうと伝えて、安心させましょう
 - 希死念慮が同じ強さで続くことはありません。極期を超えると少し弱まるものです。
 - 治療や支援により、少し状況は変わってくるもの。

参考: 自殺にまつわるウソとホント

ウソ	ホント
1. 自殺について語る人ほど、自殺をしない	1. 自殺をするほとんどの人は、その意思を明確に告げている
2. 自殺傾向のある人は、完全に死ぬことに集中してしまっている	2. 自殺傾向のある人の大多数は、生きるか死ぬかに関して両面的である
3. 自殺は何の前ぶれもなしに起こる	3. 自殺傾向のある人は、しばしば十分にわかるくらいの徴候を周囲に示している
4. 危機のあとの改善は、自殺の危険が過ぎ去ったことを意味する	4. 自殺は、絶望感を破壊的な行動に変えるような意思や活力がもてるくらいに、その人の状態が改善した時に生じやすい
5. すべての自殺が予防できるわけではない	5. すべての自殺を完全に防ぐことはできないが、しかしその大多数は予防できる
6. ひとたび自殺に傾いた人は、常に自殺の危険性をもた続ける	6. 自殺念慮は再び現れるかもしれないが、それは永久にはないし、何割かの人は二度と自殺念慮が再現することはない

支援者がつつい忘れがちなこと

- ・ 自分ひとりでは救うことは至極困難・・・
- ・ 相談を受ける人はひとりで抱え込まないこと
- ・ 周りを巻き込む
- ・ 自分自身を支援してくれる人も重要！！！！
- ・ 身近な家族・友人・支援者のネットワーク
- ・ 「愚痴が吐ける場所」の必要性
- ・ 「燃え尽き症候群」を防ぐことに繋がる

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決めつけず、批判をせずに

はなしを聴く

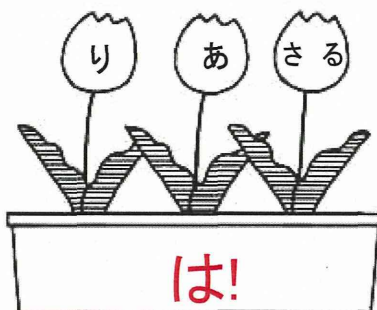
メンタルヘルス・ファーストエイドの5原則

1. リスク評価
2. 決めつけず、批判せずはなしを聞く
3. あんしん、情報を与える
4. さぼ一とを得るよう勧める
5. せるふへるぶを勧める



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判断・批判せず話を聞きましょう

こんな時、人は話をきいてもらっていないと感じます

- + わかった、と(安易に)いう。
- + 相手が自分の問題について話し終わる前に、その問題の解決方法についてあなたがしゃべってしまう。
- + 相手が話し終わる前に、割り込んで話す。
- + 相手に代わって文章を終わらせる。
- + 相手に何かをしきりに伝えたがる。
- + 自分の体験ばかり話し、相手の問題が重要でないかのようになる。

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こんな時、話をきいてくれていると感じます

- + 相手があまり意味のなさないことを言っても、理解しようとしている
- + 自分の立場や信念と違うこと(例: 中絶)を話しても、相手の物の見方を尊重しようとしている
- + 違うかもしれないと思っても、相手の判断に敬意をもっている
- + 相手の問題をその人のやり方で対処できるようにしている
- + 「良い」アドバイスをしたい、という気持ちを抑えている
- + 相手がまだその気分でない時に、あれこれと気晴らしなどを勧めない
- + 何が起きているのかを相手が理解できるよう、余裕を与えている
- + 話をきいたあとに、すこし疲れてぐったりしている

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あんしん、情報を与える

[重要ですが、なかなか実践できないところです]

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安心と情報を提供しましょう

- + うつ病は医学的な問題であること(“病気”であること)
- + うつ病は珍しくない病気であること
- + うつ病は弱さや性格の問題ではないこと
- + うつ病には効果的な治療法があること
- + 医師やカウンセラーからよい助けが得られること
- + うつ病は怠け病ではないこと-うつ病は人のやる気を障害する病気なのです
- + うつ病になるにも、治るにも少々時間がかかるけれど、適切な治療を受ければ早くきちんと良くなること

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安心と情報を提供しましょう

[重要ですが、なかなか実践できないところです]

なぜ、実践できないのか？

「素人の私が『うつ病』って言うっていいの？」

【解決法】

「あなたはうつ病です」という必要は全くありません！

「うつ病の可能性がある」という「かもしれない」を伝える！

例) 「私は専門家じゃないから詳しくは分からないけど、以前参加した講習会でうつ病のことを聞いたときの、症状となんだか貴方のいまの様子は似ているのよね……もしかしたらね、うつ病かもしれませんよ……」

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サポートを得るよう勧める

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適切な専門家のもとへ行くように伝えましょう

- + 心療内科医、精神科医
- + その他の医師
- + その他の医療・保健機関
 - 区役所保健福祉課
 - 職場内の産業医・医務室・健康相談センター
 - 学校内の医務室・保健センター・スクールカウンセラー
- + 臨床心理士やカウンセラー

例「私は専門家じゃないから詳しくは分からないけど、……もしかしたらね、うつ病かもしれませんよ……精神科や心療内科では薬やカウンセリングでよくしてくれるんですよ、一度、行ってみませんか？」

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せ ぶ へ る ぶ

- + 自分でできる対処法のなかには、臨時的なうつ病に対して治療的な効果が認められているものもあります。

自分で対応できる対処法を勧めましょう

- + これらは、自分の生活にある程度のコントロールを取り戻す感覚を助けます。
- + サポートグループはとて有益な支援になります。

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うつ病になにが効きますか？ ①

ライフスタイルと代替治療	評価
運動	😊😊
光線療法	😊😊 季節性 😊 季節性以外
セント・ジョーンズ・ワート (St.John's wort: 西洋オトギリ草)	😊
鍼灸治療	😊
アルコールをやめる (アルコールの問題がある人の場合)	😊

* セント・ジョーンズ・ワートは抗うつ剤と一緒に服用してはいけません。このハーブは多数の処方薬と相互作用があります。

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うつ病になにが効きますか？ ②

ライフスタイルと代替治療	評価
マッサージを受ける	😊
リラクゼーション	😊
葉酸(サプリメント)	😊
ヨガの呼吸法訓練	😊

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委託業務題目：「精神疾患患者早期介入のための医療従事者向け研修プログラム開発—メンタルヘルス・ファーストエイドの応用—」

機関名：九州大学 先端融合医療レドックスナビ研究拠点・医学研究院精神病態医学分野 特任准教授 加藤隆弘

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
ミクログリアに着目した精神疾患の多軸的トランスレーショナル研究—ヒト誘導ミクログリアとゲーム理論の応用。（口頭）	加藤隆弘	第1回サイコグリア研究会, 2014.6.1, 広島大学広仁会館, 広島	2014.6.1	国内
“先生転移”と“見るなの禁止”. シンポジウム「日本の精神分析」（口頭）	加藤隆弘	日本語臨床フォーラム・第4回 コンベンション, 2014.6.22, 帝京大学板橋キャンパス, 東京	2014.6.22	国内
Two translational research methods focusing on human microglia (induced microglia-like (iMG) cells / minocycline). (Oral)	Kato TA, Ohgidani M, Watabe M, Kanba S	DFG-JSPS SYMPOSIUM “SHARED PATHWAYS IN CNS DISORDERS”, 2014.6.30, Alois Alzheimer’s Microscopy Laboratorium, Department of Psychiatry and Psychology, Ludwig-Maximilians-University (LMU), Munich, Germany	2014.6.30	国外
Directly induced-neuronal (iN) cells from human fibroblasts. (Oral)	Sagata N, Kato TA, Kanba S	DFG-JSPS SYMPOSIUM “SHARED PATHWAYS IN CNS DISORDERS”, 2014.6.30, Alois Alzheimer’s Microscopy Laboratorium, Department of Psychiatry and Psychology, Ludwig-Maximilians-University (LMU), Munich, Germany	2014.6.30	国外
Direct induction of ramified microglia-like cells from human monocytes: Dynamic microglial dysfunction in Nasu-Hakola disease. (Poster)	Ohgidani M, Kato TA, Kanba S	DFG-JSPS SYMPOSIUM “SHARED PATHWAYS IN CNS DISORDERS”, 2014.6.30, Alois Alzheimer’s Microscopy Laboratorium, Department of Psychiatry and Psychology, Ludwig-Maximilians-University (LMU), Munich, Germany	2014.6.30	国外
Minocycline, a microglial inhibitor, diminishes terminal patients’ delirium? (Poster)	Hayakawa K, Kato TA, Kohjiro M, Kanba S	DFG-JSPS SYMPOSIUM “SHARED PATHWAYS IN CNS DISORDERS”, 2014.6.30, Alois Alzheimer’s Microscopy Laboratorium, Department of Psychiatry and Psychology, Ludwig-Maximilians-University (LMU), Munich, Germany	2014.6.30	国外
A single minocycline administration suppresses methamphetamine-induced behavioral sensitization in mice. (Poster)	Shimokawa N, Kato TA, Kanba S	DFG-JSPS SYMPOSIUM “SHARED PATHWAYS IN CNS DISORDERS”, 2014.6.30, Alois Alzheimer’s Microscopy Laboratorium, Department of Psychiatry and Psychology, Ludwig-Maximilians-University (LMU), Munich, Germany	2014.6.30	国外
安心して相談支援にのぞむために～相談支援における「メンタルヘルス・ファーストエイド」の理解と活用～.(口頭)	加藤隆弘	北九州市立精神保健福祉センター主催・平成26年度自殺対策支援者研修会, 2014.7.16, 北九州市総合保健福祉センター「アシスト21」, 北九州市	2014.7.16	国内

ヒトの社会的意思決定におけるミノサイクリンの影響—統合失調症患者における意思決定特性（予備的知見）—。(ポスター)	加藤隆弘, 堀川英喜, 渡部幹, 神庭重信	第10回統合失調症研究会, 2014.9.6, 東京コンベンションホール, 東京	2014.9.6	国内
「現代抑うつ症候群（新型うつ）」における諸問題臨床実践と国際共同研究の結果を踏まえて—指定討論、公募シンポジウム「「新型うつ」への心理学的アプローチ」（企画 松浦隆信）（口頭）	加藤隆弘	日本心理学会第78回大会, 2014.9.12, 同志社大学, 京都	2014.9.12	国内
Translational research focusing on risk of social isolation: Biological and psychological aspects among university students. Symposium “Mental Health Implications of Social Isolation (Organized by Alan R. Teo and Takahiro A. Kato)”(Oral)	Kato TA, Watabe M, Teo AR, Ohgidani M, Sagata A, Kubo H, Hayakawa K, Tateno M, Shimokawa N, Kanba S	WPA World Congress 2014, 2014.9.17, Centro de Convenciones Norte, Madrid, Spain	2014.9.17	国外
安心して相談支援にのぞむために～相談支援における「メンタルヘルスファーストエイド」の理解と活用（弁護士編）。（口頭）	加藤隆弘	平成26年度自死問題対策委員会法律相談登録研修会, 2014.9.22, 北九州市弁護士会館, 北九州市	2014.9.22	国内
精神疾患患者のミクログリア活性化特性と精神病理現象との相関を解明するためのトランスレーショナル研究. シンポジウム8「グリアアセンブリの生理と病態」（口頭）	加藤隆弘	第36回日本生物学的精神医学会 第57回日本神経化学学会 合同年会, 2014.9.29, 奈良県新公会堂, 奈良	2014.9.29	国内
脳内免疫細胞ミクログリアに着目した精神疾患のトランスレーショナル研究. 第三回若手研究者育成プログラム（若手研究者育成プログラム奨励賞）（口頭）	加藤隆弘	第36回日本生物学的精神医学会 第57回日本神経化学学会 合同年会, 2014.9.30, 奈良県新公会堂, 奈良	2014.9.30	国内
ヒト体細胞由来直接誘導ミクログリア・ニューロンを用いた精神疾患研究。（口頭）	加藤隆弘	第18回九大精神科教室研究会, 2014.10.18, 九州大学病院ウエストウイング, 福岡	2014.10.18	国内
Possible biological and psychosocial risk factors of hikikomori among university students. Symposium of Korea-Japan Psychiatrists Academy (KJPA) (Oral)	Kato TA	Congress of Korean NeuroPsychiatric Association (KNPA) 2014.10.24, Ramada Plaza Jeju Hotel, Jeju, South Korea	2014.10.24	国外
ストレスとミクログリア—齧歯類モデルの知見とヒト血液由来直接誘導ミクログリア様細胞作製技術の応用. シンポジウム3「ストレスと心身相関」（口頭）	加藤隆弘, 扇谷昌宏, 神庭重信	日本ストレス学会学術総会・第30回記念大会, 2014.11.7, 日本大学文理学部百年記念館, 東京	2014.11.7	国内
精神病的障害（主に統合失調症）におけるメンタルヘルスファーストエイド。（口頭）	加藤隆弘	島根県におけるゲートキーパースキルアップ研修指導者養成研修会, 2014.11.16, 出雲保健所, 出雲市, 島根	2014.11.16	国内
Translational psychiatric research focusing on microglia – Does microglial modulation prevent psychosis? Symposium (Organized by Itokawa M) (Oral)	Kato TA	The 9th International Conference on Early Psychosis, 2014,11,17, Keio Plaza Hotel, Tokyo	2014,11,17	国内
Psychosocial stress and microglia-translational research focusing on human microglia. 国際シンポジウム「ストレスによる神経炎症と神経疾患」（Oral）	Kato TA, Ohgidani M, Kanba S	第24回日本臨床精神神経薬理学会・第44回日本神経精神薬理学会 合同年会, 2014.11.22, 名古屋国際会議場, 名古屋	2014.11.22	国内
医療場面におけるうつ病の早期介入と自殺予防～メンタルヘルス・ファーストエイドの理解と活用～。(口頭)	加藤隆弘	北九州市立精神保健福祉センター主催・平成26年度自殺対策支援者研修会, 2014.11.26, 北九州市総合保健福祉センター「アシスト21」, 北九州市	2014.11.26	国内
国際調査票開発に基づく現代うつ病と社会的ひきこもりの実態調査。(口頭)	加藤隆弘, Teo AR, 館農勝, 神庭重信	ファイザーヘルスリサーチ振興財団主催 第20回ヘルスリサーチフォーラム, 2014.11.29, 千代田放送会館, 東京	2014.11.29	国内

Why do Japanese need the program of Mental Health First Aid? - Sociocultural backgrounds of Japanese social behaviors.(Oral)	Kato TA, Hayakawa K, Ikeda-Kaneko C, Kanba S	Mental Health First Aid Course for Japanese psychiatrists, 2014.12.5, Mental Health First Aid Australia, Melbourne, Australia	2014.12.5	国外
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2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所（学会誌・雑誌等名）	発表した時期	国内・外の別
Direct induction of ramified microglia-like cells from human monocytes: Dynamic microglial dysfunction in Nasu-Hakola disease.	Ohgidani M, Kato TA*, Setoyama D, Sagata N, Hashimoto R, Shigenobu K, Yoshida T, Hayakawa K, Shimokawa N, Miura D, Utsumi H, Kanba S	Scientific Reports, 4, 4957	2014年5月	国外
Effectiveness of brief suicide management training program for medical residents in Japan: A cluster randomized controlled trial.	Suzuki Y*, Kato TA, Sato R, Fujisawa D, Aoyama-Uehara K, Hashimoto N, Yonemoto N, Fukasawa M, Otsuka K	Epidemiology and Psychiatric Sciences, 23(2), 167-76	2014年6月	国外
Why medical students choose psychiatry - a 20 country cross-sectional survey.	Farooq K, Lydall GJ, Malik A, Ndeti DM; ISOSCCIP Group (including Kato TA & Kanba S), Bhugra D	BMC Medical Education, 14, 12	2014年6月	国外
BDNF induces sustained intracellular Ca ₂₊ elevation through the upregulation of surface TRPC3 channels in rodent microglia.	Mizoguchi Y*, Kato TA, Seki Y, Ohgidani M, Sagata N, Horikawa H, Yamauchi Y, Sato-Kasai M, Hayakawa K, Inoue R, Kanba S, Monji A	Journal of Biological Chemistry, 289(26), 18549-18555	2014年7月	国外
Anti-allergic mechanisms of Japanese herbal medicine, yokukansan on mast cells.	Yamamura K, Kato S, Kato TA, Mizoguchi Y, Monji A, Kanba S, Furue M, Takeuchi S*	Journal of Dermatology, 41(9): 808-814	2014年8月	国内
Microglial intracellular Ca ₂₊ signaling as a target of antipsychotic actions for the treatment of schizophrenia.	Mizoguchi Y*, Kato TA, Horikawa H, Monji A	Frontiers in Cellular Neuroscience, 8: 370	2014年10月	国外
Introducing Hikikomori from multidimensional perspectives.	Kato TA	World Child & Adolescent Psychiatry (WPA, Child and Adolescent Psychiatry Section's Official Journal), 7, 12-16	2014年12月	国外
Identification of the Hikikomori syndrome of social withdrawal: Psychosocial features and treatment preferences in four countries.	Teo AR*, Fetters MD, Stuffelbam S, Tateno M, Balhara YBS, Choi TY, Kanba S, Mathews CA, Kato TA *	International Journal of Social Psychiatry, 61(1), 64-72	2015年1月	国外
Relationship between trusting behaviors and psychometrics associated with social network and depression among young generation: a pilot study.	Watabe M*†, Kato TA *†, Teo AR, Horikawa H, Tateno M, Hayakawa K, Shimokawa N, Kanba S (†: These authors contributed equally to this work)	PLoS ONE (in press)	2015年2月	国外
統合失調症のミクログリア仮説.	神庭重信, 加藤隆弘	日本神経精神薬理学雑誌, 34, 11-13	2014年4月	国内
精神免疫学から見た身体疾患と精神疾患の生物学的共通基盤.	早川宏平, 加藤隆弘, 神庭重信	精神科治療学, 29, 171-178	2014年4月	国内
慢性炎症と統合失調症—脳内免疫細胞ミクログリアの観点から—.	加藤隆弘, 関善弘, 堀川英喜, 扇谷昌宏, 佐方功明, 佐藤美那, 山内佑允, 早川宏平, 下川憲宏, 神庭重信	分子精神医学, 54, 15-22	2014年4月	国内
脳—免疫相関が精神病理と精神発達に及ぼす影響.	加藤隆弘	日本生物学的精神医学会誌, 25, 38-42	2014年4月	国内
気分障害と糖尿病との炎症を介した共通基盤.	加藤隆弘, 園田紀之	精神科, 25, 135-140	2014年5月	国内
脳と文化—ミクログリア仮説から鑑みたエディブスコンプレックスの発生論（試論）.	加藤隆弘	こころと文化, 13(2), 116-127	2014年6月	国内

委託業務題目「プログラム開発と評価方法の検討」

機関名(独)国立精神・神経医療研究センター精神保健研究所成人精神保健研究部・精神疫学 室長

1. 学会等における口頭・ポスター発表

発表した成果(発表題目、口頭・ポスター発表の別)	発表者氏名	発表した場所(学会等名)	発表した時期	国内・外の別

2. 学会誌・雑誌等における論文掲載

掲載した論文(発表題目)	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Psychological distress after the Great East Japan Earthquake and Fukushima Daiichi Nuclear Power Plant accident: results of a mental health and lifestyle survey through the Fukushima Health Management Survey in FY2011 and FY2012.	Yabe H, Suzuki Y, Mashiko H, Nakayama Y, Hisata M, Niwa S, et al.	Fukushima journal of medical science, 60(1), 57-67,	2014年	国外
Mental health distress and related factors among prefectural public servants seven months after the great East Japan Earthquake.	Suzuki Y, Fukasawa M, Obara A, Kim Y.	Journal of epidemiology, 24(4), 287-94,	2014年	国外
Posttraumatic symptoms in elementary and junior high school children after the 2011 Japan earthquake and tsunami: symptom severity and recovery vary by age and sex.	Iwadare Y, Usami M, Suzuki Y, Ushijima H, Tanaka T, Watanabe K, et al.	Journal of pediatrics, 164(4), 917-21,	2014年	国外
Leveraging public health nurses for disaster risk communication in Fukushima City: a qualitative analysis of nurses' written records of parenting counseling and peer discussions.	Goto A, Rudd RE, Lai AY, Yoshida K, Suzuki Y, Halstead DD, et al.	BMC health services research, 14, 129,	2014年	国外
Parenting in Fukushima City in the post-disaster period: short-term strategies and long-term perspectives.	Goto A, Reich MR, Suzuki Y, Tsutomi H, Watanabe E, Yasumura S.	Disasters, 38 Suppl, 2, S179-89,	2014年	国外
Stigmatization of psychiatrists and general practitioners: results of an international survey.	Gaebel W, Zask H, Zielasek J, Cleveland HR, Samjeske K, Stuart H, Suzuki Y, et al.	European archives of psychiatry and clinical neuroscience, Sep 5. [Epub ahead of print]	2014年	国外
Relationships Between Mental Health Distress and Work-Related Factors Among Prefectural Public Servants Two Months After the Great East Japan Earthquake.	Fukasawa M, Suzuki Y, Obara A, Kim Y.	International journal of behavioral medicine, doi, 10.1007/s12529-014-9392-8,	2014年	国外
東日本大震災後のコミュニティと地域精神保健医療福祉システム再構築の課題— 支援者によるワールドカフェ方式の対話から—.	鈴木友理子, 深澤舞子, 池淵恵美, 後藤雅博, 種田綾乃, 永松千恵, 伊藤順一郎.	家族療法研究, 31(1), 110-114	2014年	国内

学会等発表実績

委託業務題目「一メンタルヘルス・ファーストエイドに基づく医療従事者への教育アプローチ—視覚教材プログラム開発」

機関名 岩手医科大学医学部災害地域精神医学講座・災害精神医学 講師

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所（学会誌・雑誌等名）	発表した時期	国内・外の別
Effects of a training workshop on suicide prevention among emergency room nurses.	Kishi Y, Otsuka K, Akiyama K, et al.	Crisis, 5, 357-61	2014年	国外
Predictors for delayed encephalopathy following acute carbon monoxide poisoning.	Kudo K, Otsuka K, Yagi J, et al.	BMC emergency medicine, 14, 3	2014年	国外
Mental health and related factors after the Great East Japan earthquake and tsunami.	Yokoyama Y, Otsuka K, Kawakami N, et al.	PLoS ONE, 9, e102497	2014年	国外
総合病院精神科における自殺予防の役割.	大塚耕太郎, 酒井明夫, 遠藤仁.	臨床精神医学, 43(6), 885-890	2014年	国内
「第3章9」適応障害および重度ストレス反応. レジデントノート別冊各科研修シリーズ. これだけは知っておきたい精神科の診かた、考え方.	大塚耕太郎, 酒井明夫.	羊土社, 107 - 110	2014年	国内
不安発作（パニック発作）. 内科外来で見るマナーエマージェンシー.	大塚耕太郎, 酒井明夫.	Medical Practice vol.31臨時増刊号. 光文堂, 172-174	2014年	国内
救急医療 治療 過換気症候群. 今日の治療指針2015.	大塚耕太郎.	医学書院, 35-36	2015年	国内

(注1) 発表者氏名は、連名による発表の場合には、筆頭者を先頭にして全員を記載すること。

(注2) 本様式はexcel形式にて作成し、甲が求める場合は別途電子データを納入すること。

委託業務題目「臨床研修医向けの研修プログラム開発」

機関名 九州大学病院臨床教育研修センター／九州大学医学研究院病態修復内科 教授

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
Cancer Stem Cell（口演）	赤司浩一	第87回日本内分泌学会学術総会 教育講演 福岡	2014. 4. 24	国内
造血器腫瘍幹細胞（口演）	赤司浩一	第3回日本血液学会東海地方会 共催セミナー 名古屋	2014. 4. 26	国内
TIM-3, as a Target for Eradication of Cancer Stem Cells（口演）	赤司浩一	The Uehara Memorial Foundation Symposium 東京	2014. 6. 17	国内
造血器腫瘍幹細胞（口演）	赤司浩一	第101回近畿血液学会地方会 特別 講演 大阪	2014. 6. 28	国内
白血病幹細胞研究のすゝめ（口演）	赤司浩一	第76回日本血液学会学術集会 学会賞受賞講演 大阪	2014. 11. 2	国内
TIM-3 Signaling and Human Myeloid Leukemia Stem Cell Development（口演）	Koichi Akashi	KEYSTONE SYMPOSIA, Keystone, Colorado USA	2015. 2. 26	国外
がん幹細胞コンセプトに基づく血液疾患診療の未来像	赤司 浩一	第1回日本検査血液学会議員会 社員総会 特別講演 東京	2015. 3. 8	国内

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所（学会誌・雑誌等名）	発表した時期	国内・外の別
Reduced carotid intima-media thickness in systemic lupus erythematosus patients treated with cyclosporine A.	Oryoji K, Kiyohara C, Horiuchi T, Tsukamoto H, Niuro H, Shimoda T, Akashi K, Yanase T.	Mod Rheumatol, 24, 86-92	2014年	国外
Evaluation of the extent of ground-glass opacity on high-resolution CT in patients with interstitial pneumonia associated with systemic sclerosis: Comparison between quantitative and qualitative analysis.	Yabuuchi H, Matsuo Y, Tsukamoto H, Horiuchi T, Sunami S, Kamitani T, Jinnouchi M, Nagao M, Akashi K, Honda H.	Clin Radiol, 69, 758-764	2014年	国外
Combination of bortezomib, thalidomide, and dexamethasone (VTD) as a consolidation therapy after autologous stem cell transplantation for symptomatic multiple myeloma in Japanese patients.	Takashima S, Miyamoto T, Kadowaki M, Ito Y, Aoki T, Takase K, Shima T, Yoshimoto G, Kato K, Muta T, Shiratsuchi M, Takenaka K, Iwasaki H, Teshima T, Kamimura T, Akashi K.	Int J Hematol, 100, 159-164	2014年	国外
The ordered acquisition of Class II and Class I mutations directs formation of human t(8:21) acute myelogenous leukemia stem cell.	Shima T, Miyamoto T, Kikushige Y, Yuda J, Tochigi T, Yoshimoto G, Kato K, Takenaka K, Iwasaki H, Mizuno S, Goto N, Akashi K.	Exp Hematol, 42, 955-965	2014年	国外
Treatment of Patients with Adult T Cell Leukemia/Lymphoma with Cord Blood Transplantation: A Japanese Nationwide Retrospective Survey.	Kato K, Choi I, Wake A, Ujike N, Taniguchi S, Moriuchi Y, Miyazaki Y, Nakamae H, Oku E, Murata M, Eto T, Akashi K, Sakamaki H, Kato K, Suzuki R, Yamanaka T, Utsunomiya A.	Biol Blood Marrow Transplant, 20, 1968-1974	2014年	国外
Dectin-2 Is a Direct Receptor for Mannose-Capped Lipoarabinomannan of Mycobacteria.	Yonekawa A, Saijo S, Hoshino Y, Miyake Y, Ishikawa E, Suzukawa M, Inoue H, Tanaka M, Yoneyama M, Oh-Hora M, Akashi K, Yamasaki S.	Immunity, 41, 402-413	2014年	国外
CD41 marks the initial myelo-erythroid lineage specification in adult mouse hematopoiesis: Redefinition of murine common myeloid progenitor.	Miyawaki K, Arinobu Y, Iwasaki H, Kohno K, Tsuzuki H, Iino T, Shima T, Kikushige Y, Takenaka K, Miyamoto T, Akashi K.	Stem Cells, 33, 976-987	2014年	国外

Identification of the hikikomori syndrome of social withdrawal: Psychosocial features and treatment preferences in four countries

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Abstract

Background: Hikikomori, a form of social withdrawal first reported in Japan, may exist globally but cross-national studies of cases of hikikomori are lacking.

Aims: To identify individuals with hikikomori in multiple countries and describe features of the condition.

Method: Participants were recruited from sites in India, Japan, Korea and the United States. Hikikomori was defined as a 6-month or longer period of spending almost all time at home and avoiding social situations and social relationships, associated with significant distress/impairment. Additional measures included the University of California, Los Angeles (UCLA) Loneliness Scale, Lubben Social Network Scale (LSNS-6), Sheehan Disability Scale (SDS) and modified Cornell Treatment Preferences Index.

Results: A total of 36 participants with hikikomori were identified, with cases detected in all four countries. These individuals had high levels of loneliness (UCLA Loneliness Scale $M = 55.4$, $SD = 10.5$), limited social networks (LSNS-6 $M = 9.7$, $SD = 5.5$) and moderate functional impairment (SDS $M = 16.5$, $SD = 7.9$). Of them 28 (78%) desired treatment for their social withdrawal, with a significantly higher preference for psychotherapy over pharmacotherapy, in-person over telepsychiatry treatment and mental health specialists over primary care providers. Across countries, participants with hikikomori had similar generally treatment preferences and psychosocial features.

Conclusion: Hikikomori exists cross-nationally and can be assessed with a standardized assessment tool. Individuals with hikikomori have substantial psychosocial impairment and disability, and some may desire treatment.

Keywords

Social isolation, cross-national, culture

Introduction

The notion of hermits and recluses has existed in many cultures for time immemorial. However, in recent years a

particularly severe syndrome of social withdrawal first identified in Japan has garnered the interest of researchers

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and the lay public alike. Called hikikomori, it has been defined as ‘a phenomenon in which persons become recluses in their own homes, avoiding various social situations (e.g., attending school, working, having social interactions outside of the home, etc.) for at least six months’ (Saito, 2010). Individuals with hikikomori are frequently reported to have social contact predominantly via the internet and some reports suggest overlap with heavy internet use (De Michele, Caredda, Delle Chiaie, Salvati, & Biondi, 2013; Lee, Lee, Choi, & Choi, 2013). An estimated 232,000 Japanese currently suffer from hikikomori, and 1.2% of community-residing Japanese between ages 20–49 have a lifetime history of hikikomori (Koyama et al., 2010). A combination of a shy personality, ambivalent attachment style and life experiences including rejection by peers and parents – among other factors – may promote the development of hikikomori (Krieg & Dickie, 2013). Furthermore, scientific studies point to genetic and other biological influences on sociality that, although not specific to hikikomori, could have implications for the study of the etiology of hikikomori (Meyer-Lindenberg & Tost, 2012). While researchers debate the merits of hikikomori as a psychiatric diagnosis (Teo & Gaw, 2010), practicing clinicians in Japan indicate they view hikikomori as a ‘disorder’ (Tateno, Park, Kato, Umene-Nakano, & Saito, 2012).

Previous reports suggest hikikomori may exist outside of Japan. For instance, case reports have described the presence of hikikomori in several other countries (Furuhashi et al., 2012; Garcia-Campayo, Alda, Sobradie, & Sanz Abos, 2007; Sakamoto, Martin, Kumano, Kuboki, & Al-Adawi, 2005; Teo, 2013). When presented with vignettes of hikikomori, psychiatrists from nine countries around the world indicated that such cases existed in their clinical practices (Kato et al., 2012). Nonetheless, cross-national studies designed to identify hikikomori have been lacking. Reasons for the lack of recognition have included ambiguity about the features of hikikomori (Tateno et al., 2012; Watts, 2002), and inconsistent or insufficiently detailed definitions of hikikomori (Furuhashi et al., 2011; Garcia-Campayo et al., 2007; Sakamoto et al., 2005). This has caused concern that researchers may not be referring to the same phenomenon. We have previously proposed a research-grade definition of hikikomori, but this definition has not been empirically tested (Teo & Gaw, 2010). Additionally, prior reports of hikikomori have focused on assessment of psychopathology (Lee et al., 2013; Nagata et al., 2013) but fewer studies – especially outside of Japan – have examined psychosocial features more broadly, despite the common belief that sociocultural factors are important contributors to hikikomori (Kato et al., 2012). Finally, prior research has examined treatment recommendations for hikikomori by psychiatrists, but we are unaware of studies that have explored patients’ treatment preferences (Kato et al., 2012).

Aims

1. To identify cases of hikikomori cross-nationally;
2. To describe the psychosocial features and treatment preferences of individuals with hikikomori;
3. To explore possible differences in psychosocial features and treatment preferences of individuals with hikikomori across countries.

In this study, we examined individuals with social withdrawal using such a standardized definition of hikikomori cross-nationally.

Method

Design

We conducted a cross-national case series in India, Japan, South Korea and the United States.

Study participants

Participants who had a history of or current social withdrawal were recruited. Indian participants were referred from psychiatric outpatient clinics. Japanese and Korean participants were referrals from either a hospital or community mental health center. At the US site, participants responded to an online advertisement. All participants were adults between the ages of 18 and 39, noninstitutionalized and fluent in the local language of their respective site (English used in India). Participants with a self-reported history of schizophrenia, dementia, mental retardation or autism spectrum disorders and participants with social withdrawal due to a chronic physical illness or injury were excluded. A total of 108 individuals were screened for eligibility, with 26 excluded for not meeting criteria for hikikomori, 18 for age, 2 for schizophrenia, 1 with an autism spectrum disorder and 6 who withdrew consent. This left 55 (51%) who met initial eligibility criteria. An additional 18 individuals did not complete consent or study measures and 1 was excluded for later reporting a history of schizoaffective disorder, leaving a final sample of 36 for analysis. Participants were compensated US\$50 or equivalent in local currency. This study was approved by the institutional review boards of each participating site. All participants provided written informed consent for participation.

Measures

Assessment of hikikomori. Researchers administered an interview to assess for the presence of suspected hikikomori (see Appendix 1 for questionnaire), adapted from our earlier proposed definition (Teo & Gaw, 2010). We defined hikikomori as (1) spending most of the day and nearly every day at home (duration of at least 6 months);

(2) avoiding social situations, such as attending school or going to a workplace (duration of at least 6 months); (3) avoiding social relationships, such as friendships or contact with family members (duration of at least 6 months); and (4) significant distress or impairment due to social isolation.

Self-report measures. We administered the University of California, Los Angeles (UCLA) Loneliness Scale, the Lubben Social Network Scale-6 (LSNS-6), the Sheehan Disability Scale (SDS), the Cornell Treatment Preferences Index (CTPI) and a questionnaire on sociodemographic characteristics to participants.

The UCLA Loneliness Scale is a 20-item questionnaire that assesses how often individuals endorse subjective feelings of loneliness (e.g. 'How often do you feel that you lack companionship?'). The score range is 20 to 80, with higher scores indicating greater degrees of loneliness (Russell, 1996). Each item is rated on a 4-point scale from 1 ('never') to 4 ('always'). As the Revised UCLA Loneliness Scale has been validated Korean and Japanese samples, it was used at these sites (Kim, 1997; Kudou & Nishikawa, 1983). At the United States and Indian sites, Version 3 of the UCLA Loneliness Scale was used. Version 3 is identical to the revised version, except for minor wording adjustments (Russell, 1996).

The LSNS-6 is a 6-item questionnaire that assesses the number of people in an individual's social network with whom one has social contact (e.g. 'How many relatives do you see or hear from at least once a month?') and who are a source of social support (e.g. 'How many friends do you feel close to such that you could call on them for help?'). There are two subscales for family and friends. The total score range is 0–30 (0–15 for each subscale), and a total score less than 12 is indicative of social isolation (Lubben et al., 2006). Such a score implies fewer than two social network members, on average, for each item. Each item is rated on a 6-point scale from 0 ('none') to 5 ('nine or more'). The LSNS-6 has been validated in Korean and Japanese (Hong, Casado, & Harrington, 2011; Kurimoto et al., 2011).

The SDS is a 5-item questionnaire that assesses disability or functional impairment. The first three items evaluate level of disruption in each of three domains (work/school, social life and family life/home responsibilities) with response choices on a 0 ('not at all') to 10 ('extremely') scale, while the remaining two items evaluate days lost and days unproductive (Sheehan, 1983). Higher scores indicate more disability. The word 'symptom' in the SDS was replaced with 'social isolation' for this study. The scale has been validated in Korean and Japanese (Lee & Song, 1991; Yoshida, Otsubo, Tsuchida, Wada, & Kamijima, 2004).

The CTPI is a 6-item questionnaire that evaluates several different depression treatment preferences, including treatment modality and type of treatment provider (Raue, Schulberg, Heo, Klimstra, & Bruce, 2009). We modified

the CTPI to assess preferences related to social isolation (e.g. 'I wish to receive counseling or psychotherapy for my social isolation'). The response scale for the first five items is a 5-point Likert scale from 1 ('strongly disagree') to 5 ('strongly agree'), and the final item uses ranked treatment preferences. For the CTPI, as well as other instruments that lacked an existing translation in a target language, we translated the instrument and used back translation as verification of adequate adaption.

Statistical analysis

We compared variables using the t-test and chi-square for continuous and categorical variables, respectively. When any group or cell contained five or fewer participants, we replaced the t-test and chi-square with the Wilcoxon Rank-Sum test and Fisher's exact test, respectively. Linear regression models were used to examine the association between country and several outcome variables, including loneliness, social network and functional disability. Logistic regression models were similarly used for the association between country and the dichotomized treatment preferences. The regression models were adjusted for the effects of the educational level and age as these were significant in bivariate correlations with country. Sample sizes for particular analyses vary due to differences in number of responses. Significance level for all tests was set at $p < .05$ and tests were two-tailed. Data were analyzed using Stata Version 12 (Stata Corp.).

Results

Identification of hikikomori

Regarding the first aim, 36 adult participants with social withdrawal who met criteria for hikikomori were identified. The cases were found in all four countries included in this study. As seen in Table 1, the vast majority were men with varied education levels. The majority of participants lived with family members; just four (11%) lived alone. Their self-reported period of social withdrawal was on average 2.1 years.

Psychosocial features

We quantitatively described a number of features of individuals with hikikomori. Scores on the UCLA Loneliness Scale indicated a high level of loneliness among all participants ($M = 55.4$, $SD = 10.5$). By comparison, prior studies with normal controls in American, Indian and Korean samples have shown mean scores of about 40 (SD around 9) (Jayashankar, 2013; Lee & Lee, 2004; Russell, 1996), and studies with depressed participants have shown average scores of 49.8 (Groves, Golub, Parsons, Brennan, & Karpiak, 2010). Likewise, social networks for our sample were

Table 1. Sociodemographic characteristics of participants with hikikomori in four countries.

Characteristic	Total	Japan	USA	India	Korea	<i>p</i>
	(<i>n</i> = 36)	(<i>n</i> = 11)	(<i>n</i> = 11)	(<i>n</i> = 10)	(<i>n</i> = 4)	
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	
Male	29 (81)	10 (91)	7 (64)	9 (90)	3 (75)	.33
Age (years)						
18–21	11 (32)	2 (18)	2 (18)	3 (30)	4 (100)	} .04
22–30	11 (32)	3 (27)	4 (36)	6 (60)	0 (0)	
31–49	12 (35)	6 (55)	5 (45)	1 (10)	0 (0)	
Education level						
High school graduate or less	16 (44)	7 (64)	2 (18)	3 (30)	4 (100)	} .01
Some college or more	20 (56)	4 (36)	9 (81)	7 (70)	0 (0)	
Living situation						
Lives with others	32 (89)	10 (91)	8 (73)	10 (100)	4 (100)	} .2
Lives with no one	4 (11)	1 (9)	3 (27)	0 (0)	0 (0)	

weak, with participants scoring a mean of 9.7 ($SD = 5.7$) on the LSNS-6. By comparison, prior studies with normal controls have shown average scores of 17.4 (Lubben et al., 2006). Individuals with hikikomori showed slightly higher scores on the family subscale ($M = 5.4$, $SD = 3.0$) than the friend subscale ($M = 4.3$, $SD = 3.5$). Participants with hikikomori had moderate levels of functional disability on the SDS ($M = 16.5$, $SD = 7.9$), levels comparable to patients with psychiatric disorders and more than three-fold higher than those with no mental illness in a study of a study of primary care patients (Olfson et al., 1997). Impairment was highest in terms of social life/leisure activities, compared to work/school and family life.

Treatment preferences

A total of 78% of the sample expressed a desire for treatment for their social withdrawal. In terms of modality of treatment, participants preferred psychotherapy ($M = 3.6$, $SD = 1.5$) over medication ($M = 2.9$, $SD = 1.4$); $t(31) = 2.13$, $p = .04$. In addition, participants also were significantly more likely to be interested in psychotherapy and medicine management delivered *in-person* compared to an option for provision by *webcam* ($p < .001$ for both comparisons). Participants ranked individual psychotherapy most as a desired treatment, with few desiring complementary and alternative treatments such as herbal remedies or exercise (Figure 1). As for treatment provider, participants preferred mental health specialists ($M = 3.6$, $SD = 1.2$) over primary care physicians ($M = 2.7$, $SD = 1.2$); $t(34) = 3.87$, $p < .001$.

Cross-national comparisons

We compared treatment preferences and psychosocial characteristics of participants across the four countries in

this study as our exploratory aim: that is, to generate hypotheses about cross-national differences in hikikomori that might be tested in future studies. Across countries, results generally were similar. For comparison of treatment preferences across countries, the Korean sample was excluded from analyses due to small sample size ($n = 4$). In adjusted models controlling for age and level of education, there were no statistically significant differences in overall desire for treatment, desire for pharmacotherapy, desire for psychotherapy, interest in webcam-delivered medication management or psychotherapy, interest in in-person-delivered medication management or desire for treatment provided by a mental health professional. Participants in the United States were significantly less likely to desire treatment by a primary care physician compared to Japan (odds ratio (OR) = 0.04, 95% confidence interval (CI) = 0.00–0.60). Also, Indian participants had a significantly lower interest in in-person psychotherapy (OR = 0.00, 95% CI = 0.00–0.31). Table 2 illustrates psychosocial features of our sample of individuals with hikikomori. As illustrated by the beta coefficient, American participants demonstrated on average a 12-point higher score on the UCLA Loneliness Scale and a 4-point higher score on the family life subscale of the SDS, as compared with Japanese participants. Indian participants had significantly stronger social networks but higher levels of functional disability. Finally, Korean subjects had significantly higher levels of loneliness, weaker friendships in their social network and higher functional disability.

Discussion

This study bolsters evidence that hikikomori, as a phenotype of severe social withdrawal, exists cross-nationally. Strengths of our approach include use of a

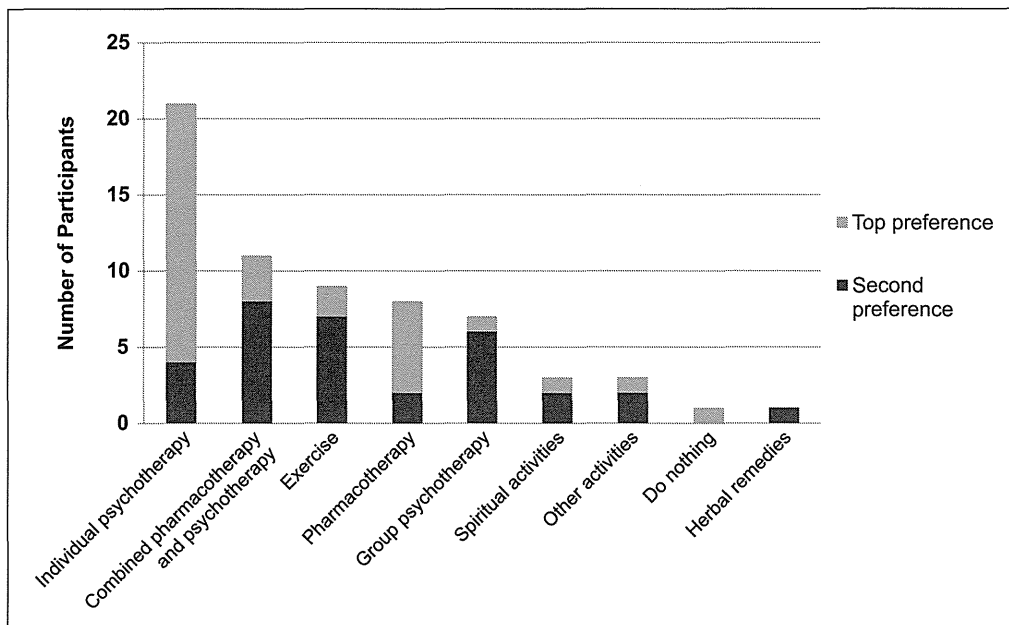


Figure 1. Top two treatment preferences of participants with hikikomori for their social withdrawal ($n = 32$).

Table 2. Multivariable linear regression of exploratory associations between psychosocial features of hikikomori and country.

Characteristic	Japan	USA		India		Korea	
	($n = 11$)	($n = 11$)	(95% CI)	($n = 10$)	(95% CI)	($n = 4$)	(95% CI)
Loneliness (UCLA Loneliness Scale)	Ref	12.35**	(5.41, 19.29)	-3.78	(-10.90, 3.33)	16.31***	(6.44, 26.17)
Social network (Lubben Social Network Scale – 6)	Ref	0	(-4.69, 4.68)	5.05*	(0.24, 9.85)	-5.37	(-12.03, 1.29)
Family subscale	Ref	-0.24	(-2.77, 2.30)	3.41*	(0.81, 6.01)	-0.86	(-4.46, 2.75)
Friend subscale	Ref	0.23	(-2.73, 3.19)	1.64	(-1.40, 4.67)	-4.51*	(-8.72, -0.31)
Functional disability (Sheehan Disability Scale)	Ref	4.95	(-1.90, 11.81)	9.04*	(2.16, 15.92)	13.86*	(3.44, 24.27)
Disrupted work/school work	Ref	-0.36	(-3.40, 2.68)	2.20	(-0.85, 5.25)	1.49	(-3.13, 6.12)
Disrupted social life/leisure activities	Ref	2.04	(-0.29, 4.36)	2.86*	(0.48, 5.24)	4.67*	(1.01, 8.32)
Disrupted family life/home responsibilities	Ref	4.03**	(1.54, 6.52)	4.06**	(1.51, 6.61)	7.70***	(3.78, 11.61)

UCLA: University of California, Los Angeles.

Analyses controlled for age and level of education. Japan used as the reference group (Ref) for country comparisons.

*statistically significant at the .05 level; **statistically significant at the .01 level; ***statistically significant at the .001 level.

standardized definition and assessment tool for hikikomori across four countries with diverse cultures and operationalizing hikikomori with discrete questions about the frequency, length and quality of social withdrawal. Past approaches have relied on a single, complex question (Koyama et al., 2010; Umeda, Kawakami, & The World Mental Health Japan Survey Group, 2002–2006, 2012), an approach that may cause misunderstanding by placing a high cognitive burden on the respondent (Schwarz, 2007). Thus, this study offers a new interview tool to help assess for hikikomori. Our data showing loneliness and limited connections with social network members among study participants sup-

port the validity of our assessment approach to hikikomori as we have defined it.

Psychosocial features

Perhaps the most striking features of hikikomori participants in this study were high loneliness scores and impaired social network scores. Our descriptive data paint a picture of the average individual with hikikomori being intensely lonely and deficient in social support, apparently unable to maintain meaningful social ties. This is despite rarely living alone and indicating a desire for treatment of their social withdrawal.

Treatment preferences

In these individuals who have been avoided social contact for such a prolonged period of time, we were surprised to find a consistent preference for treatment delivered in-person, as opposed to telepsychiatry-style. We believe this is the first study to describe treatment preferences in a sample of individuals with hikikomori. Understanding treatment preferences is a valuable first step for intervention research, particularly in light of evidence that treatment response rates for hikikomori are low (Nagata et al., 2013). Individuals with hikikomori may feel ambivalent about their desire for social relationships, and a patient–provider relationship may offer an entry point into re-establishing social connections. Given these results, future intervention studies for hikikomori might consider evaluating home visitation, particularly when conducted by a mental health professional and with an aim of boosting the social support of hikikomori patients (Dickens, Richards, Greaves, & Campbell, 2011; Lee et al., 2013). Other interventions that have shown promise in populations with mental illnesses and are thought to work by bolstering social relationships, such as peer support, might be investigated (Pfeiffer, Heisler, Piette, Rogers, & Valenstein, 2011; Proudfoot et al., 2012).

Limitations

This study was designed as a case series, and therefore several limitations in interpretation of the results bear note. First, our sample was small, but we have employed statistical methods that adjust for sample size. Second, cross-national comparisons should only be regarded as exploratory because different recruitment methods were used across countries, data harmonization across cultures is always imperfect and adjustment for potential confounders was limited to basic sociodemographic variables. Third, individuals with hikikomori who are able to participate in a research study such as this are unlikely to be representative of all of those with hikikomori. In particular, individuals with hikikomori are often perceived as resistant to undergo treatment, and our sample may represent those who have milder symptoms or begun recovery. Nonetheless, this highlights a group that may represent great opportunity for intervention. Fourth, as this was primarily a descriptive study, no comparison group was included, though we have included comparisons with normative data for selected measures. Finally, the CTPI has not been validated in international samples, and therefore treatment preference data must be interpreted cautiously.

Conclusion

In sum, this study suggests that hikikomori exists cross-nationally, can be assessed with a brief interview tool and is associated with substantial loneliness, impaired social networks, disability and desire for treatment. Results of

our study suggest several possible directions for future research. First, we believe future cross-national studies of hikikomori should obtain larger samples, which could be achieved by focusing on just two locations for comparison. Another approach would be to compare hikikomori participants to a control group such as participants with social anxiety disorder to help tease out differences between hikikomori and other conditions. Although it was beyond the scope of this study to conduct formal psychometric testing on our hikikomori assessment tool, future research on the reliability and validity of the hikikomori diagnostic interview would be helpful. Furthermore, development and testing of a hikikomori scale could help with conceptual clarity (e.g. constructs associated with hikikomori) and distinction from related conditions such as social anxiety disorder. Once validated, a hikikomori scale or diagnostic interview could then be applied to research on the prevalence and detection of hikikomori. To reach a more representative sample including individuals unable to leave their residence under any circumstance, Internet-based surveys on hikikomori should be developed. Finally, interventions that account for patient preference might be tested.

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References

- De Michele, F., Caredda, M., Delle Chiaie, R., Salvati, M., & Biondi, M. (2013). Hikikomori (ひきこもり): A culture-bound syndrome in the web 2.0 era. *Rivista di Psichiatria*, *48*, 354–358.
- Dickens, A. P., Richards, S. H., Greaves, C. J., & Campbell, J. L. (2011). Interventions targeting social isolation in older people: A systematic review. *BMC Public Health*, *11*, 647.
- Furuhashi, T., Figueiredo, C., Pionnié-Dax, N., Fansten, M., Vellut, N., & Castel, P. H. (2012). Pathology seen in French “Hikikomori”. *Seishin shinkeigaku zasshi = Psychiatria et neurologia Japonica*, *114*, 1173–1179.
- Furuhashi, T., Suzuki, K., Teruyama, J., Sedooka, A., Tsuda, H., Shimizu, M., ... Castel, P. H. (2011). Commonalities and differences in hikikomori youths in Japan and France. *Nagoya Journal of Health, Physical Fitness & Sports*, *34*(1), 29–33.
- Garcia-Campayo, J., Alda, M., Sobradie, N., & Sanz Abos, B. (2007). A case report of hikikomori in Spain. *Medicina Clinica (Bare)*, *129*, 318–319.

- Grov, C., Golub, S. A., Parsons, J. T., Brennan, M., & Karpiak, S. E. (2010). Loneliness and HIV-related stigma explain depression among older HIV-positive adults. *AIDS Care*, 22, 630–639.
- Hong, M., Casado, B. L., & Harrington, D. (2011). Validation of Korean versions of the Lubben Social Network Scales in Korean Americans. *Clinical Gerontologist*, 34, 319–334.
- Jayashankar. (2013). *Study on personality and loneliness among the students of IIT Hyderabad*. IDP Poster Presentation. Lecture conducted from Indian Institute of Technology Hyderabad, India.
- Kato, T. A., Tateno, M., Shinfuku, N., Fujisawa, D., Teo, A. R., Sartorius, N., ... Kanba, S. (2012). Does the “hikikomori” syndrome of social withdrawal exist outside Japan? A preliminary international investigation. *Social Psychiatry & Psychiatric Epidemiology*, 47, 1061–75.
- Kim, O. S. (1997). Korean version of the Revised UCLA Loneliness Scale: Reliability and validity test. *The Journal of Nurses Academic Society*, 27, 871–879.
- Koyama, A., Miyake, Y., Kawakami, N., Tsuchiya, M., Tachimori, H., & Takeshima, T. (2010). Lifetime prevalence, psychiatric comorbidity and demographic correlates of ‘hikikomori’ in a community population in Japan. *Psychiatry Research*, 176, 69–74.
- Krieg, A., & Dickie, J. R. (2013). Attachment and hikikomori: A psychosocial developmental model. *International Journal of Social Psychiatry*, 59(1), 61–72.
- Kudou, R., & Nishikawa, M. (1983). Kaiteiban UCLA kodokukun shakudo [The study for loneliness: Assessment of reliability and validity of the Revised UCLA Loneliness Scale]. *Experimental Social Psychological Research*, 22, 99–108.
- Kurimoto, A., Awata, S., Ohkubo, T., Tsubota-Utsugi, M., Asayama, K., Takahashi, K., ... Imai, Y. (2011). Reliability and validity of the Japanese version of the abbreviated Lubben Social Network Scale. *Nihon Ronen Igakkai Zasshi/ Japanese Journal of Geriatrics*, 48, 149–157.
- Lee, J. Y., & Lee, S. H. (2004). Depression, loneliness, impulsiveness, sensation-seeking and self-efficacy of adolescents with cybersexual addiction. *The Korea Journal of Counseling*, 12, 145–155.
- Lee, Y. S., Lee, J. Y., Choi, T. Y., & Choi, J. T. (2013). Home visitation program for detecting, evaluating, and treating socially withdrawn youth in Korea. *Psychiatry and Clinical Neurosciences*, 67, 193–202.
- Lee, Y., & Song, J. (1991). A study of the reliability and the validity of the BDI, SDS, and MMPI-D Scales. *Korean Journal of Clinical Psychology*, 10, 98–113.
- Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., Kruse, W. V. R., Beck, J. C., & Stuck, A. E. (2006). Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *The Gerontologist*, 46, 503–513.
- Meyer-Lindenberg, A., & Tost, H. (2012). Neural mechanisms of social risk for psychiatric disorders. *Nature Neuroscience*, 15, 663–668.
- Nagata, T., Yamada, H., Teo, A. R., Yoshimura, C., Nakajima, T., & van Vliet, I. (2013). Comorbid social withdrawal (hikikomori) in outpatients with social anxiety disorder: Clinical characteristics and treatment response in a case series. *The International Journal of Social Psychiatry*, 59, 73–78.
- Olfson, M., Fireman, B., Weissman, M. M., Leon, A. C., Sheehan, D. V., Kathol, R. G., ... Farber, L. (1997). Mental disorders and disability among patients in a primary care group practice. *American Journal of Psychiatry*, 154, 1734–1740.
- Pfeiffer, P. N., Heisler, M., Piette, J. D., Rogers, M. A., & Valenstein, M. (2011). Efficacy of peer support interventions for depression: A meta-analysis. *General Hospital Psychiatry*, 33, 29–36.
- Proudfoot, J. G., Jayawant, A., Whitton, A. E., Parker, G., Manicavasagar, V., Smith, M., & Nicholas, J. (2012). Mechanisms underpinning effective peer support: A qualitative analysis of interactions between expert peers and patients newly-diagnosed with bipolar disorder. *BMC Psychiatry*, 12, 196.
- Raue, P. J., Schulberg, H. C., Heo, M., Klimstra, S., & Bruce, M. L. (2009). Patients’ depression treatment preferences and initiation, adherence, and outcome: A randomized primary care study. *Psychiatric Services*, 60, 337–343.
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66, 20–40.
- Saito, K. (2010). *Hikikomori no hyouka shien ni kansuru gaidorain* [Guideline on evaluation and support of hikikomori]. Tokyo, Japan: Ministry of Health, Labor, and Welfare.
- Sakamoto, N., Martin, R. G., Kumano, H., Kuboki, T., & Al-Adawi, S. (2005). Hikikomori, is it a culture-reactive or culture-bound syndrome? Nidotherapy and a clinical vignette from Oman. *International Journal of Psychiatry in Medicine*, 35, 191–198.
- Schwarz, N. (2007). Cognitive aspects of survey methodology. *Applied Cognitive Psychology*, 21, 277–287.
- Sheehan, D. V. (1983). *Sheehan disability scale*. Washington, DC: American Psychiatric Association.
- Tateno, M., Park, T. W., Kato, T. A., Umene-Nakano, W., & Saito, T. (2012). Hikikomori as a possible clinical term in psychiatry: A questionnaire survey. *BMC Psychiatry*, 12, 169.
- Teo, A. R. (2013). Social isolation associated with depression: A case report of hikikomori. *International Journal of Social Psychiatry*, 59, 339–341.
- Teo, A. R., & Gaw, A. C. (2010). Hikikomori, a Japanese culture-bound syndrome of social withdrawal? *The Journal of Nervous and Mental Disease*, 198, 444–449.
- Umeda, M., Kawakami, N., & The World Mental Health Japan Survey Group, 2002–2006. (2012). Association of childhood family environments with the risk of social withdrawal (“hikikomori”) in the community population in Japan. *Psychiatry and Clinical Neurosciences*, 66, 121–129.
- Watts, J. (2002). Public health experts concerned about “hikikomori”. *The Lancet*, 359, 1131.
- Yoshida, T., Otsubo, T., Tsuchida, H., Wada, Y., & Kamijima, K. (2004). Reliability and validity of the Sheehan Disability Scale-Japanese Version. *Rinsyoseishinyakuri*, 7, 1645–1653.

