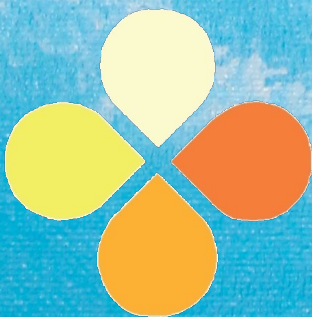

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Avant-propos

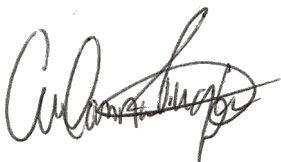
Arlanna PUGH

Rédactrice en chef

L'accès universel aux soins de santé, bien qu'étant un droit humain fondamental, n'en reste pas moins un objectif ambitieux. Partie intégrante de la civilisation, les organismes de santé publique ont fait d'importants progrès dans la promotion d'une bonne santé, tant au niveau local que mondial. À la base, le domaine de la santé publique travaille à prévenir les maladies et promouvoir de bonnes habitudes de vie au sein de la population. Les données de surveillance épidémiologiques contribuent à l'établissement de politiques de santé et de protection importantes. Bien que ce domaine ait grandement évolué, il reste toujours des défis à relever. Les méthodes de collecte de données objectives et empiriques ont ouvert la porte à de nouvelles avenues de connaissances. La mondialisation et l'avènement de nouvelles technologies permettent aux chercheurs d'interpréter les données et de leur trouver une fin pratique de manière culturellement, socialement et écologiquement appropriée. Avec le contrôle des épidémies et le développement de vaccins, la recherche en santé publique continue d'inspirer le développement de politiques fondées sur des données probantes et d'encourager de nouveaux chercheurs à travailler pour un meilleur futur.

Aujourd'hui, il est clair que la recherche fait partie intégrante de l'enseignement supérieur. S'il y a une source de connaissances, il y a un potentiel pour la découverte et l'innovation. C'est pour cette raison que la Revue interdisciplinaire des sciences de la santé entretient cette plate-forme pour les étudiants qui souhaitent mettre en valeur des recherches novatrices. Depuis sa création en 2009, la Revue interdisciplinaire des sciences de la santé souligne l'importance des déterminants de la santé dans notre quotidien. Ainsi, ce numéro spécial sur la santé publique rend hommage à cette tradition, présentant des œuvres originales de nombreux étudiants.

C'est avec une profonde gratitude que je tiens à remercier tous ceux qui ont été impliqués dans la publication et la diffusion de ce numéro. D'abord, j'aimerais remercier Agata Dzwonek et Andrea Zumrova pour la page couverture originale, Dr. Raywat Deonandan, pour ses conseils académique et professionnels, ainsi que Jade Taki et Gatien de Broucker pour leur aide avec la traduction. Je tiens également à remercier le comité de rédaction RISS - pour leur contribution en tant que pairs-examineurs, leur intérêt pour la collaboration interdisciplinaire et leur passion pour le progrès académique. Enfin, je tiens à remercier tous les étudiants-chercheurs qui ont manifesté un intérêt pour la recherche et la santé publique et ont saisi l'occasion de partager leur travail avec leurs pairs. C'est grâce au travail acharné de ces personnes dévouées que les articles présentés dans ce numéro contribueront à l'amélioration de la recherche en santé publique.



Arlanna Pugh, BHSc

Rédactrice en chef (2014-2015)

Foreward

Arlanna PUGH

Editor-in-Chief

Health care for all, a human right and priority, is an ideal yet ambitious goal. As an integral part of human life since the beginning of civilization, public health agencies have made significant strides towards ensuring health on both a local and global level. At its core, the field of public health strives to prevent disease and promote health among communities and populations. Largely influenced by surveillance data, which direct the establishment of public health policies, the field of public health research has grown and has tremendous potential. Furthermore, the shift towards more objective and empirical methods of testing, contrary to subjective opinion and experience, has opened up a gateway to new avenues of knowledge. Never before has public health research reignited the desire to ask questions and seek answers. With the advent of technology and globalization, this research can now be interpreted through a multifaceted lens and applied in culturally, socially, and environmentally appropriate ways. From tracking epidemics to developing vaccines, public health research will continue to inspire evidence-based policies and encourage both new and experienced researchers to look towards a brighter, healthier future.

Today, it is evident that inquiry and investigation are integral to the education delivered at academic institutions. Where there is a source of knowledge, there is the potential for discovery and innovation. It is for this reason that the Interdisciplinary Journal of Health Sciences strives to create a platform for students interested in showcasing noteworthy research. Having held a strong focus on the determinants of health since its inception in 2009, this special issue on Public Health pays tribute to the journal's traditional roots and features original works from student researchers.

It is with sincerest appreciation and gratitude that I thank all those involved in the publication and dissemination of this issue. First, I would like to thank Agata Dzwonek and Andrea Zumrova for this issue's creative cover page, Dr. Raywat Deonandan, for his academic and professional advice, as well as Jade Taki and Gatien de Broucker for their invaluable translation assistance. I would also like to thank the IJHS editorial committee – for their contribution as peer reviewers, interest in interdisciplinary collaboration, and passion for academic growth. Last, I would like to thank all the student researchers who allowed their interest in research and public health to flourish and seized the opportunity to share their work with peers. It is through the hard work of these devoted individuals that the articles presented in this issue can now contribute to the growing body of public health research.



Arlanna Pugh, BHSc

Editor-in-Chief (2014-2015)

Étude Préliminaire Entre L'Attachement Amoureux et la Dramatisation Face à la Douleur chez des Individus Vivant Avec de la Douleur Chronique

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Résumé :

L'objectif de cette étude préliminaire est d'examiner la perception du soutien offert par le partenaire amoureux comme médiateur de la relation entre l'attachement amoureux du patient (anxiété face à l'abandon et évitement de l'intimité) et la dramatisation de la douleur par ce dernier, de même que les liens directs entre ces variables. L'échantillon d'analyse comprend 46 adultes qui vivent quotidiennement avec de la douleur chronique et qui sont en relation de couple depuis au moins 6 mois. Les participants ont complété *l'Experiences in Close Relationships*, le *Perceived Responsiveness Scale* et le *Pain Catastrophizing Scale*. Les résultats indiquent que plus un individu a un attachement non sécurisant, moins il perçoit de soutien de son partenaire amoureux. L'anxiété face à l'abandon est associée à plus de dramatisation face à la douleur.

Mots-clés :

Douleur chronique, attachement amoureux, soutien conjugal, dramatisation face à la douleur

Abstract:

(traduction)

The objective of this preliminary study is to examine the perception of the support displayed by the romantic partner as a mediator of the relationship between the emotional attachment of the patient (there is anxiety related to abandonment and avoidance of intimacy) and the level of pain catastrophizing expressed by the patient. The sample being analyzed is comprised of 46 adults who live on a daily basis with chronic pain and who have been in a relationship for at least 6 months. The participants have completed the *Experiences in Close Relationships*, the *Perceived Responsiveness Scale* and the *Pain Catastrophizing Scale*. Results indicate that the more an individual has an insecure attachment; the less he/she will perceive receiving support from his/her romantic partner. The anxiety related to abandonment is associated with more pain catastrophizing.

Keywords:

Chronic pain, romantic attachment, spousal support, pain catastrophizing

Introduction

La douleur chronique est définie comme une expérience sensorielle et émotionnelle difficile liée à des lésions tissulaires réelles ou potentielles qui persistent au-delà de trois à six mois ou de la durée habituelle de guérison (Merskey & Bogduk, 1994). Il est estimé qu'environ 19% des Canadiens vivent avec de la douleur chronique (Schopflocher, Taenzer, & Jovey, 2011). Cette problématique de santé peut entraîner des effets néfastes dans tous les domaines de la vie (Lafontaine, Greenman, & Péloquin, 2010). Il s'avère donc pertinent d'examiner empiriquement des modèles théoriques explicatifs du vécu de la douleur chronique. Cette étude préliminaire a pour objectif d'examiner le rôle médiateur de la perception du soutien offert par le partenaire amoureux, sur la relation entre l'attachement amoureux du patient et sa dramatisation de la douleur ainsi que les liens directs entre ces variables.

Les recherches sur l'attachement amoureux ont été influencées par la théorie de l'attachement de Bowlby (1969/1982) qui postule que l'enfant tente de se rapprocher de sa figure d'attachement (la personne dont il reçoit les soins) afin de l'aider à réguler sa détresse lorsque, par exemple, il a peur ou connaît de la douleur. Par contre, lorsque ses besoins sont satisfaits de manière adéquate et stable, l'enfant développera un attachement sécurisant, soit le sentiment qu'il mérite l'amour des autres et la confiance dans la disponibilité des autres en cas de besoin (Bartholomew, 1997). Le système comportemental d'attachement se maintiendrait au cours de la vie et à l'âge adulte, la figure d'attachement la plus importante est habituellement le partenaire amoureux (Hazan & Shaver, 1987). Plusieurs recherches utilisent un modèle bidimensionnel de l'attachement amoureux, soit l'anxiété face à l'abandon (le degré auquel un individu rumine la possibilité d'être rejeté/abandonné par son partenaire amoureux) et l'évitement de l'intimité (le degré auquel un individu est inconfortable avec la proximité et l'intimité émotionnelle; Mikulincer & Goodman, 2006). Un attachement amoureux sécurisant réfère à peu d'anxiété et d'évitement.

Le modèle de régulation des affects (Shaver & Mikulincer, 2002) est un modèle raffiné de la dynamique du système d'attachement selon lequel un stresser (p. ex., la douleur) active le système d'attachement. Les personnes disposant d'un attachement sécurisant ont des attentes positives envers la disponibilité et la réceptivité de leur partenaire. Elles sont enclines à demander du soutien au besoin. Par contre, les individus avec un attachement non sécurisant perçoivent leur partenaire comme insuffisamment attentif

ou réceptif et ont plutôt tendance à recourir à des stratégies secondaires d'attachement (Shaver & Mikulincer, 2002).

Précisément, les personnes avec un attachement anxieux ont recours aux stratégies d'hyperactivation. Leur système d'attachement est chroniquement activé de sorte qu'elles manifestent une hypervigilance dans leur relation amoureuse, ce qui les amène à rechercher de l'attention, de la protection et de la coopération de la part de leur partenaire amoureux, de manière excessive. À l'inverse, les personnes avec un attachement évitant ont plutôt recours aux stratégies de désactivation, c'est-à-dire qu'elles gèrent la douleur seules en maximisant la distance cognitive, émotionnelle et physique des autres (Mikulincer, Shaver, & Pereg, 2003). Dans un contexte de douleur, nous pouvons considérer la dramatisation comme une stratégie d'hyperactivation. En effet, les personnes qui dramatisent sont décrites comme celles qui amplifient ou exagèrent la menace ou la sévérité de la douleur (actuelle ou anticipée) et sont incapables de dévier leur attention. D'ailleurs, les recherches sur la dramatisation montrent qu'elle a une fonction communicative qui a pour but de maximiser la proximité et de solliciter une réponse de l'environnement social (Sullivan et coll., 2001).

Récemment, des réflexions se sont intéressées aux liens théoriques entre l'attachement, la perception de soutien conjugal et la dramatisation face à la douleur. Ces études menées auprès de la population générale ont démontré que l'attachement sécurisant est associé à une perception de soutien disponible, à une plus grande confiance et une plus grande satisfaction dans le soutien qui est offert. À l'opposé, les personnes ayant un attachement non sécurisant rapportent percevoir que moins de soutien leur est disponible et elles sont moins satisfaites de celui-ci (Mikulincer & Shaver, 2007). Chez les personnes qui connaissent de la douleur chronique, l'attachement non sécurisant a été associé à une perception de réaction négative du partenaire face à la douleur et le contraire a été trouvé pour l'attachement sécurisant (Forsythe, Romano, Jensen, & Thorn, 2012).

Deuxièmement, des études menées auprès d'échantillons de personnes connaissant et ne connaissant pas de la douleur, ont démontré que les personnes disposant d'un attachement anxieux manifestaient plus de dramatisation que celles ayant un attachement sécurisant (McWilliams & Asmundson, 2007; McWilliams & Holmberg, 2010; Meredith, Strong, & Feeney, 2005; Meredith, Strong, & Feeney, 2006). Cependant, les résultats ayant trait à l'attachement

évitant et la dramatisation sont incohérents : une étude a montré que plus une personne avait un attachement évitant moins elle dramatisait mais seulement lorsque son score d'anxiété face à l'abandon était contrôlé (McWilliams & Holmberg, 2010), tandis qu'une autre étude a trouvé que l'attachement évitant était lié à plus de dramatisation, ce lien étant faible mais significatif (McWilliams & Asmundson, 2007). De même, une autre étude a rapporté que les personnes vivant avec de la douleur chronique ayant un attachement évitant dramatisaient plus après une période de 12 mois de traitement multidisciplinaire comparativement aux individus avec d'autres types d'attachement, ce qui va à l'encontre de la théorie. Les chercheurs ont indiqué que les personnes disposant d'un attachement évitant pourraient possiblement surmonter leur anxiété envers l'intimité seulement lorsqu'elles perçoivent une menace catastrophique (Ciechanowski, Sullivan, Jensen, Romano, & Summers, 2003).

Troisièmement, les résultats d'études portant sur la perception de soutien conjugal et la dramatisation chez des personnes vivant avec de la douleur chronique, démontrent que moins une personne perçoit du soutien social, plus elle dramatisait (Cano, 2004). Quoique la dramatisation ait été associée à la perception d'avoir le droit au soutien (Cano, Leong, Heller, & Lutz, 2009), elle a aussi été associée à la perception de réactions punitives du partenaire (Buenaver, Edwards, & Haythornwaite, 2007) ainsi qu'à des réactions de sollicitation et de distraction (Cano, 2004).

Objectif et Hypothèses

La présente étude préliminaire a examiné les effets directs et indirects (médiation) entre l'attachement amoureux, la perception de soutien conjugal et la dramatisation face à la douleur auprès d'individus en relation de couple qui vivent de la douleur chronique. Il est postulé que l'attachement non sécurisant d'une personne, sous forme d'anxiété face à l'abandon et d'évitement de l'intimité, sera lié négativement au soutien perçu (soit à la perception que son partenaire sera en mesure de la comprendre, l'accepter et l'apprécier). L'anxiété sera aussi positivement liée à la dramatisation, tandis que l'évitement y sera négativement associé. Il est aussi postulé que le soutien perçu sera lié négativement à la dramatisation pour le modèle d'anxiété et positivement connecté à la dramatisation pour le modèle d'évitement. Enfin, il est postulé que la perception de soutien conjugal sera un médiateur de la relation entre l'attache-

ment amoureux non sécurisant (anxiété et évitement) et la dramatisation. Précisément, plus un individu est anxieux face à l'abandon, moins il percevra de soutien conjugal et cela aura pour impact d'augmenter sa dramatisation. Un plus haut niveau d'évitement chez une personne l'amènera aussi à percevoir moins de soutien conjugal mais cela aura pour effet de diminuer sa dramatisation.

Méthode

Participants et Procédure

Cette étude a été approuvée par un comité d'éthique et d'intégrité de la recherche. Les critères d'inclusion exigeaient que les participants soient âgés d'au moins 18 ans, aient une bonne compréhension du français ou de l'anglais, soient en relation de couple depuis au moins 6 mois et vivent avec de la douleur tous les jours pendant au moins 3 mois à un ou à des endroits particuliers sur leur corps. Les participants ont été recrutés par le biais d'affiches et de dépliants déposés dans diverses cliniques de santé dans la région d'Ottawa et avec l'aide d'associations canadiennes pour des personnes ayant de la douleur chronique. Ces dernières ont fait circuler des courriels à leurs membres et ont aussi affiché l'information de l'étude sur leur site Internet. Les participants à l'étude ont répondu soit à la version papier des questionnaires ou à la version électronique (à partir du site sécurisé Survey Monkey) et ils ont reçu 20\$ de compensation. Un total de 53 personnes ont complété les questionnaires, mais les scores de 7 individus ont été exclus, car 5 d'entre eux n'ont pas répondu à un questionnaire et 2 autres avaient un partenaire qui avait également participé. Ainsi, pour éviter la dépendance des données, un seul des partenaires a été choisi aléatoirement. L'échantillon final comprenait 46 individus, c'est-à-dire 12 hommes (26%) et 34 femmes (74%). L'âge moyen des participants était de 42 ans (étendue = 19,5 à 71,6; $ÉT = 14,27$) et en moyenne, ils étaient en relation de couple depuis 13 ans, soit de 8 mois à 51 ans ($ÉT = 12,78$). La plupart étaient mariés (61%) ou conjoints de fait (22%) et la majorité n'avait pas d'enfant (54%). Leur revenu moyen annuel est de 28 875,65\$ (étendue = 0 à 90 000; $ÉT = 22 774,77$). La majorité (82%) ont reçu un diagnostic de douleur chronique.

Mesures

Experiences in close relationships (Brennan Clark, & Shaver, 1998; Lafontaine & Lussier, 2003). Ce questionnaire de 36 énoncés mesure l'attachement amoureux selon 2 di-

mensions: l'anxiété face à l'abandon et l'évitement de l'intimité. Chaque échelle contient 18 énoncés cotés sur une échelle de type Likert allant de 1 (fortement en désaccord) à 7 (fortement en accord). Des moyennes ont été calculées et des scores élevés indiquent une anxiété ou un évitement accru. Ce questionnaire comporte de bonnes qualités psychométriques (Brennan et coll., 1998; Lafontaine & Lusier, 2003). Les coefficients de cohérence interne pour la présente étude sont de .92 pour l'anxiété et .84 pour l'évitement.

Perceived Responsiveness Scale (Reis, 2006; Lafontaine, 2008). Cet instrument contient 18 énoncés mesurant à quel point le répondant sent qu'il est généralement bien compris, accepté et apprécié par son partenaire amoureux. Les énoncés sont cotés sur une échelle de type Likert de 1 (pas du tout vrai) à 9 (complètement vrai). La somme des scores a été calculée. Un score élevé signifie que la personne se sent comprise, acceptée et appréciée par son partenaire. Un coefficient alpha de .91 a été obtenu dans la version originale comparé à .98 dans la présente étude.

Pain Catastrophizing Scale (Sullivan, Bishop, & Pivik, 1995; French et coll., 2005). Ce questionnaire de 13 énoncés mesure la présence et la sévérité des pensées catastro-

phiques reliées à la douleur selon trois dimensions (amplification, rumination, impuissance). Il permet d'obtenir trois scores individuels selon celles-ci et un score total. Pour la présente étude, le score total est privilégié en raison de la taille de l'échantillon. Les énoncés sont cotés sur une échelle de type Likert de 0 (jamais) à 4 (presque toujours) et un score élevé signifie un niveau de dramatisation accru. Cette échelle a une bonne cohérence interne, une bonne fidélité test-retest ($r = .85$) et une bonne validité de construit (Sullivan et coll., 1995; French et coll., 2005). Pour la présente étude, nous avons obtenu un coefficient alpha de Cronbach de .94.

Résultats

Toutes les analyses statistiques effectuées pour la présente étude ont été faites avec le logiciel *SPSS Statistics* version 21. Les données ont été vérifiées pour des valeurs manquantes. Le test MCAR de Little a révélé que le patron des données manquantes s'avérait complètement aléatoire ($\chi^2(782) = 65.04, p > .05$) et qu'il n'y avait pas de variable avec plus de cinq pourcent de données manquantes. Les données manquantes ont donc été évaluées en utilisant la méthode *Expectation Maximization* (EM). Il n'y avait pas

Tableau 1 Statistiques descriptives et analyses de variance pour la perception de soutien offert par le partenaire amoureux, l'attachement amoureux et la dramatisation face à la douleur.

Variables	Hommes (n = 12)		Femmes (n = 34)		Total (n = 46)		ANOVA
	M	ÉT	M	ÉT	M	ÉT	
Perception de soutien	140.51	10.63	131.50	35.14	133.85	30.81	$F(1, 44) = .75$ ns
Évitement de l'intimité	2.31	.86	2.41	.88	2.39	.86	$F(1, 44) = .12$ ns
Anxiété face à l'abandon	3.07	1.16	3.54	1.34	3.42	1.30	$F(1, 44) = 1.13$ ns
Dramatisation	19.75	12.23	22.63	11.37	21.88	11.54	$F(1, 44) = .55$ ns

Note. Des analyses de variance (ANOVA) ont été effectuées afin de tester les différences entre les hommes et les femmes. Puisqu'aucune différence significative n'a été trouvée, toutes les analyses subséquentes étaient effectuées avec l'échantillon total. ns, non significatif.

de score extrême multivarié tel que vérifié par la distance de Mahalanobis; aucun cas ne dépassait la valeur critique ($F(4, 41) = 15.55$). Les statistiques descriptives univariées ont aussi été vérifiées et les données ne présentaient aucun score extrême.

Les moyennes des scores totaux obtenus pour chaque questionnaire en fonction du genre sont présentées dans le Tableau 1. Les résultats de corrélations bivariées démontrent que l'attachement non sécurisant, sous forme d'anxiété face à l'abandon et d'évitement de l'intimité, est lié négativement à la perception du soutien émis par le partenaire amoureux ($r = -.31, p < .05$ et $r = -.48, p < .001$, respectivement). De plus, nos résultats indiquent une relation positive entre l'anxiété et la dramatisation face à la douleur ($r = .46, p < .001$) ainsi qu'entre les deux dimensions de l'attachement non sécurisant ($r = .52, p < .01$) [1]. Contrairement à ce qui était attendu, aucune corrélation significative n'a été trouvée entre l'évitement et la dramatisation ($r = .13, p > .05$) ni entre la perception du soutien conjugal et la dramatisation ($r = .01, p > .05$).

Analyses des Effets Directs et Indirects

Deux modèles ont été examinés. La variable indépendante était l'anxiété face à l'abandon pour le premier modèle et l'évitement de l'intimité pour le deuxième modèle. Pour chacun, la perception du soutien du partenaire était la variable médiatrice et la dramatisation face à la douleur était la variable dépendante (voir Tableau 2). Les effets directs entre chaque dimension de l'attachement non sécurisant (anxiété et évitement) et la perception de sou-

ten conjugal se sont avérés significatifs, indiquant que plus une personne a un attachement non sécurisant, moins elle perçoit de soutien conjugal. L'effet direct entre plus d'anxiété face à l'abandon et plus de dramatisation s'est aussi avéré significatif. Contrairement à nos hypothèses, les liens directs entre l'évitement et la dramatisation et entre la perception de soutien et la dramatisation ne sont pas significatifs et les résultats n'appuient pas une médiation complète ou partielle pour aucun des deux modèles (point estimé = $-.49$, 95% IC bootstrap = -2.27 à $.17$ et point estimé = $-.61$, 95% IC bootstrap = -2.83 à 2.30 , respectivement).

Discussion

Cette étude préliminaire s'est inspirée du Modèle de régulation des affects (Shaver & Mikulincer, 2002) et visait à examiner les effets directs et indirects entre l'attachement amoureux, la perception du soutien conjugal et la dramatisation face à la douleur chez des individus vivant avec de la douleur chronique.

D'abord, nos résultats confirment l'hypothèse selon laquelle les deux dimensions de l'attachement non sécurisant sont négativement liées à la perception du soutien conjugal. Alors, plus un individu rumine la possibilité d'être abandonné par son partenaire ou plus il est inconfortable avec la proximité et l'intimité émotionnelle, moins il perçoit que son partenaire est en mesure de le comprendre, l'accepter et l'apprécier. Ce résultat appuie les théories et

Tableau 2 Effets totaux et directs de l'attachement non sécurisant sur la dramatisation face à la douleur par la perception de soutien

	Coefficient	Erreur standard	t
Premier modèle (anxiété face à l'abandon)			
Effet total			
Anxiété → Dramatisation	4.07**	1.19	3.42
Effets directs			
Anxiété → Dramatisation	4.55***	1.25	3.66
Anxiété → Soutien	-7.53*	3.38	-2.23
Anxiété → Dramatisation	.07	.05	1.24
Deuxième modèle (évitement de l'intimité)			
Effet total			
Évitement → Dramatisation	1.71	2.00	.86
Effets directs			
Évitement → Dramatisation	2.32	2.30	1.01
Évitement → Soutien	-17.17***	4.72	-3.64
Évitement → Dramatisation	.04	.06	.55

Note. * $p < 0.05$. ** $p < 0.1$. *** $p < 0.001$.

résultats empiriques existants (Forsythe et coll., 2012).

Ensuite, tel que postulé, il existe un lien significatif entre l'anxiété face à l'abandon et la dramatisation. Comme il ressort des recherches précédentes (Meredith et coll., 2005; Meredith et coll., 2006; McWilliams & Asmundson, 2007), il semble qu'un individu qui s'inquiète à l'idée d'être rejeté ou abandonné par son partenaire amoureux ait recours à la dramatisation dans le but de maximiser la proximité envers celui-ci. Contrairement à ce qui était attendu théoriquement, il n'y avait pas de lien significatif entre un plus fort évitement et une plus faible dramatisation. McWilliams et Holmberg (2010) ont aussi obtenu une absence de relation entre l'évitement et la dramatisation, mais après avoir contrôlé statistiquement pour l'anxiété face à l'abandon, ils ont obtenu une relation négative entre l'évitement et la dramatisation. L'absence de lien entre ces variables pour la présente étude pourrait alors être comprise par le fait qu'il se peut que certains individus inconfortables avec l'intimité émotionnelle aient recours à la dramatisation et d'autres non. Effectivement, les personnes qui ont un attachement craintif, c'est-à-dire qui ont à la fois un degré élevé d'anxiété face à l'abandon et d'évitement de l'intimité, auraient tendance à osciller entre les stratégies d'hyperactivation et de désactivation (Paquin, 2013). Une combinaison des niveaux d'anxiété et d'évitement devrait être examinée en lien avec la dramatisation dans des études futures.

Puis, contrairement à ce qui a été postulé, il ne semble pas qu'une faible perception de soutien conjugal soit liée à plus ou moins de dramatisation. Une explication possible pour cette absence de lien est que le questionnaire utilisé mesure le sentiment général d'être compris, accepté et apprécié par son partenaire. Peut-être qu'un questionnaire mesurant la perception de soutien spécifique à la douleur pourrait mener à des résultats différents.

Enfin, l'hypothèse selon laquelle la perception de soutien est un médiateur de la relation entre l'attachement amoureux et la dramatisation n'a pas été confirmée. Une explication possible est la faible puissance statistique. Il est également possible que d'autres variables liées à l'évaluation de soi et/ou de la douleur (p. ex., la perception d'efficacité personnelle, l'évaluation de la douleur comme étant menaçante ou un défi) puissent mieux expliquer la relation entre l'attachement et la dramatisation (Meredith, Ownsworth, & Strong, 2008).

Conclusion

La présente étude a certaines limites. D'abord, on ne peut la généraliser à l'ensemble de la population, en raison de la taille de l'échantillon et de la faible puissance statistique. Pour avoir une puissance de 0.8 avec un alpha de 0.05, une taille d'effet moyenne et deux prédicteurs (anxiété et évitement), un échantillon d'au moins 68 participants aurait été souhaité. Aussi, étant donné que les participants ont complété le questionnaire chez eux, il se pourrait que leur partenaire ait été présent et que leur présence ait influencé leur honnêteté. Un biais d'échantillonnage est également possible, car il est probable que des individus avec un attachement sécurisant versus insécurisant soient enclin à participer à l'étude. Effectivement, les scores totaux obtenus montrent des scores d'anxiété et d'évitement sous les points de coupure d'insécurité (Brassard et coll., 2012). Enfin, la nature corrélationnelle de cette étude nous prévient d'inférer des liens de causalité entre les variables étudiées malgré la direction théoriquement proposée. Il serait souhaitable que des recherches longitudinales tentent de déterminer les relations temporelles entre ces variables.

Notes

[1] Il est à noter que les deux dimensions de l'attachement non sécurisant ont souvent été corrélées dans les recherches antérieures (Cameron, Finnegan, & Morry, 2012).

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The Promise of a Qualitative Case Study Approach for Research on Caregiver Involvement in Inpatient Traumatic Brain Injury Rehabilitation

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Résumé :

(traduction)

Objectif : Démontrer que, théoriquement, une approche qualitative par étude de cas est fort prometteuse pour la recherche sur l'implication des soignants dans la réadaptation après une lésion cérébrales traumatique (LCT) chez les patients hospitalisés.

Méthodes: Une approche narrative sur la réadaptation post-LCT et des études de cas issues de la littérature sont présentées afin d'expliquer notre raisonnement préconisant l'utilisation d'une approche qualitative par étude de cas pour faire de la recherche dans ce domaine.

Résultats: Nous avons découvert qu'il existe quatre raisons interconnectées qui expliquent pourquoi cette approche de recherche est bien adaptée pour étudier l'implication des soignants dans la réadaptation post-LCT chez les patients hospitalisés. Plus spécifiquement, une approche qualitative par étude de cas nous permet : (a) de comprendre le contexte de la réadaptation post-LCT ; (b) de tenir compte de la complexité de l'implication des soignants ; (c) d'adapter la recherche aux besoins pratiques et éthiques des patients avec une LCT et de leurs soignants ; et (d) de développer de la recherche congruente à la théorie centrée sur la famille.

Conclusion: Une approche qualitative par étude de cas est capable de tenir compte de la complexité et du contexte qui entourent l'implication des soignants dans la réadaptation post-TBI chez les patients hospitalisés. Une approche par étude de cas est aussi congruente avec les circonstances de la réadaptation en milieu hospitalier et peut prendre en considération la théorie centrée sur la famille, une théorie importante afin de comprendre pleinement l'implication des soignants.

Mots-clés :

Soignant, étude de cas, qualitative, la réhabilitation, une lésion cérébrale traumatique

Abstract:

Purpose: To demonstrate that, theoretically, a qualitative case study approach holds substantial promise for conducting research on caregiver involvement in inpatient traumatic brain injury (TBI) rehabilitation.

Methods: Narrative reviews of the TBI rehabilitation and case study literature are presented to explain our rationale for advocating the use of a qualitative case study approach for research in this area.

Results: We found that there are four interconnected reasons why this research approach is well suited for investigating caregiver involvement in inpatient TBI rehabilitation. More specifically, a qualitative case study approach allows us to: (a) address the context of inpatient TBI rehabilitation; (b) account for the complexity of caregiver involvement; (c) adapt research to the practical and ethical needs of TBI inpatients and their caregivers; and (d) create research that is congruent with family-centered theory.

Conclusion: A qualitative case study approach has the ability to address the complexity and context that surrounds caregiver involvement in inpatient TBI rehabilitation. A case study approach is also congruent with the characteristics of inpatient rehabilitation settings and can take into consideration family-centered theory, which is instrumental to understanding caregiver involvement.

Keywords:

Caregiver, case study, qualitative, rehabilitation, traumatic brain injury

Introduction

Caregivers play an important role in the short- and long-term rehabilitation of individuals (Fleming, Sampson, Cornwell, Turner, & Griffin, 2012; Foster et al., 2012). This is especially true of caregivers whose loved ones are recovering from a traumatic brain injury (TBI). During the early phase of recovery, in acute care and inpatient rehabilitation, caregivers can play a valuable role by, for example, acting as a source of information for the healthcare team and assisting in goal setting and care planning (Foster et al., 2012). During later phases of recovery, caregivers support the patient with TBI as he/she attempts to live independently, and reenter school, work, and other community-based activities (Degeneffe, 2001). The literature suggests that caregiver involvement in the patient's rehabilitation for TBI can determine the degree of his/her recovery (Kreutzer et al., 2009). Specifically, studies have shown that patients with TBI have better cognitive and physical functional outcomes when their loved ones are actively involved in their rehabilitation (Braga, Da Paz Junior, & Ylvisaker, 2005; Chua, Ng, Yap, & Bok, 2007; Sherer et al., 2007). This support and care is also viewed as an important predictor of behavior change during the early stages of recovery from brain injury. It is believed that involving caregivers in inpatient rehabilitation may increase patient participation and thus, result in greater potential for outcome improvement (Harris, Eng, Miller, & Dawson, 2010).

Despite the key role that caregivers play, we know relatively little about caregiver involvement in adult inpatient TBI rehabilitation. There is minimal research on how the role of caregivers unfolds and how it is best facilitated by healthcare providers (Foster et al., 2012). To elucidate their complex roles in the rehabilitation of adults with TBI and to determine how healthcare providers can facilitate (or hinder) caregiver involvement during inpatient care, researchers need to explore the use of different research approaches for investigating this topic, including the use of approaches situated in qualitative paradigms. In this paper, we demonstrate that, theoretically, a qualitative case study approach holds substantial promise for conducting research on caregiver involvement in inpatient TBI rehabilitation. We explore the key features of case study research and delineate four interconnected reasons why this research approach is well suited for investigating this topic area.

What is a Qualitative Case Study Approach?

Qualitative research has been surrounded by debate, and case study research is no exception. Case study research is one of multiple approaches to qualitative inquiry; however, the prominent theorists in qualitative research continue to debate what exactly it is and therefore, it may be somewhat difficult for those conducting research in TBI rehabilitation to clearly understand this approach. Stake (2005) proposes that case study research is not a methodology but a purposeful choice of what is to be studied, such as a person or event, bounded by time and place. Yin (2009) and Creswell (2013) instead argue that case study research is in fact a methodology, consisting of its own theory and analysis of how inquiry should proceed. In line with Yin and Creswell's views (Creswell, 2013; Yin, 2009) and to ensure rigor and quality in qualitative TBI rehabilitation research, we also consider case study research a methodology. The case study approach has a long history across many disciplines, including anthropology, law, political science, psychology, and medicine, and this is due in part to the case being the unit of analysis. Within the diversity of disciplines using case study research, it has been reported as valuable to evaluation and practice research for patient assessment, and documenting and analyzing care implementation processes and health outcomes (Gilgun, 1994; Yin, 2003).

Key Features of a Qualitative Case Study Approach

It is important to understand the defining features of a case study approach before utilizing this approach in TBI research. Yin (2009) defines case study as "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 18). The primary feature of case study research is the case as the unit of analysis and thus begins with the identification of one or more cases, such as a person, a group, an organization, or an event (Creswell, 2013). After identifying the case(s) of interest, a researcher must understand and decide his/her intent for conducting the case study. The intent may be to illustrate a unique case or to understand a problem, such as the lack of understanding regarding caregiver involvement in adult inpatient TBI rehabilitation (Creswell, 2013). Case studies are appropriate for exploring complex situations and allow for an in-depth

understanding of the case(s) (Yin, 2003). To obtain this level of understanding, a researcher must collect various forms of data, such as interviews, observations, documents, artifacts, or audiovisual materials (Creswell, 2013).

Whether a single case or multiple cases are chosen for a study, data analysis may consist of analyzing the case as a whole or as individual components within the case, or across cases to provide a comparison. During analysis, the researcher can identify themes and create a thorough description of the case(s). In order to effectively present the findings for the knowledge user, the researcher can then organize the themes chronologically, across cases for comparison, or present them as a theoretical model. Lastly, the researcher should offer the knowledge user concluding statements on his/her lessons learned from studying the case(s) (Creswell, 2013).

Types of Case Studies

Yin (2003) outlines six different types of case studies: exploratory, descriptive and explanatory, each in either a single or multiple case study format. Simply put, a single case study is when a researcher chooses to study one case, whereas a multiple case study is when a researcher studies two or more cases. An exploratory case study is typically used when little is known about a phenomenon and it aims to identify potential questions and hypotheses for subsequent studies. A descriptive case study aims to thoroughly describe the case(s) within their context. Finally, an explanatory case study explains how something happened, implying a cause and effect relationship.

Reasons for Using a Case Study Approach to Explore Caregiver Involvement in Inpatient Traumatic Brain Injury Rehabilitation

A Case Study Approach Addresses the Context of Inpatient TBI Rehabilitation

Context is the site, location, environment, or milieu that surrounds an area of investigation (Mathison, 2005). It is often multi-layered and made up of organizational, social, and political dimensions, which can facilitate or hinder research efforts. Since the context of TBI rehabilitation settings can impact patients and staff members as well as influence the level of involvement of caregivers in rehabili-

tation processes, it is an important variable to consider when conducting research. A case study approach allows researchers to study a phenomenon that is not readily distinguishable from its context (Yin, 2003) and thus, it represents a promising research approach for investigating caregiver involvement in TBI rehabilitation. Within this specific rehabilitation setting, caregivers often play a unique and especially active role in the care and services provided to patients (Degeneffe, 2001; Rosenbaum, King, Law, King, & Evans, 1998). The inpatient rehabilitation setting in itself is equally distinct, interconnecting many disciplines and service providers who work with patients and their caregivers. Thus, the inclusion of context is very important when conducting research in this area. Through the use of a case study approach one may be able to answer the following research questions while at the same time recognizing the distinguishing traits of this setting: How are caregivers involved in adult inpatient TBI rehabilitation? How do rehabilitation professionals facilitate (or hinder) caregiver involvement in adult inpatient TBI rehabilitation?

A Case Study Approach Accounts for the Complexity of Caregiver Involvement in Inpatient TBI Rehabilitation

One of the main benefits of using a qualitative case study approach is that it allows a researcher to examine complex situations (Yin, 2009). This is especially appropriate for both caregiver involvement and inpatient TBI rehabilitation. Caregiver involvement is a complex phenomenon and might be considered more so with adult patients. While caregiver involvement might be more readily viewed as inherent in pediatric rehabilitation, the interactions between an adult patient and their caregiver(s) can become complex when the patient is able and willing to participate in their own rehabilitation. In decision making and other care processes, the patient's perspectives and needs may vary from those of their caregiver(s), creating a complex dynamic. The perspectives of the caregivers may also differ from those of the healthcare providers caring for and providing services to the patients. It is important to recognize that caregiver involvement is not meant to remove control or responsibility from patients who are capable of making decisions and participating in their own care. Healthcare providers are therefore responsible for balancing the best interests of the patient with the recognition of caregivers' perspectives and needs, and professional expertise (Allen & Petr, 1998).

This complexity also extends to the rehabilitation setting itself. A rehabilitation setting encompasses professionals from a multitude of disciplines and various other important stakeholders. Rehabilitation for patients with TBI involves a collaborative team approach including medicine, nursing, rehabilitation therapy, psychology, social work, as well as the caregivers and patients themselves. Depending on individual needs, rehabilitation services may include occupational therapy, physiotherapy, therapeutic recreation, speech-language therapy, and cognitive rehabilitation, among others. These stakeholders interact on a day-to-day basis in decision making with a common goal of successful outcomes for both patients and caregivers. While each team member brings a unique perspective and expertise to a patient's care, outcomes are dependent on the successful integration of team members and productive interactions (Behm & Gray, 2012). Therefore, the interdisciplinary makeup of rehabilitation units/centers and their programs not only make these settings unique, but also lead to their dynamic and complex nature, which can be challenging to study.

A qualitative case study approach allows researchers to capture and explore this complexity through the inclusion of multiple perspectives (Yin, 2009). Given all those involved in inpatient TBI rehabilitation, there are certainly many perspectives to consider. Patients, caregivers, and the healthcare providers caring for and providing services to patients with TBI are important sources of information to acknowledge when researching caregiver involvement in TBI rehabilitation. Complexity can also be captured by relying on multiple forms of data (Yin, 2003). For example, using a case study approach, researchers can conduct qualitative interviews with patients, caregivers, and healthcare providers. They can observe conversations and interactions between patients, caregivers, and healthcare providers, as well as events such as team rounds and case conferences. They can collect and analyze documents relevant to patient care such as chart notes, policy and procedure documents, and any materials given to caregivers. Finally, they can collect relevant demographic information to develop a complete picture of caregiver involvement in inpatient TBI rehabilitation.

A Case Study Approach Adapts to the Practical and Ethical Needs of Inpatient TBI Rehabilitation

As mentioned above, in rehabilitation, each patient and caregiver is considered unique (Rosenbaum et al., 1998) and as such, each patient's case is unique. In inpatient TBI

rehabilitation, healthcare providers will develop, with the patient and their caregiver(s), an intervention plan that is tailored to the patient's and caregiver's needs (Tsaousides & Gordon, 2009; Ylvisaker et al., 2007). For this reason, it is appropriate to view the patient, his/her caregiver(s), and associated healthcare providers as participants within a distinct and individual case. This demonstrates that case study research is well suited to inpatient TBI rehabilitation. Furthering this argument, case study research is respectful of the importance of viewing individuals as unique but also as embedded within a system. While each patient is viewed as having his/her own set of impairments and needs, he/she is also viewed within the context of his/her support system and environment. Nutt (2012) argues that this perspective is important in practice for the sake of respecting multiculturalism and remaining culturally competent and ethically sound in both care and research activities.

A Case Study Approach Creates Research that is Congruent with Family-Centered Theory

Family-centered theory has been widely implemented in pediatric rehabilitation practice and many are calling for the universal adoption of this approach in all health services (Bamm & Rosenbaum, 2008), including those that care for adult patients with TBI. Family-centered theory posits that caregivers are central in the lives of individual patients, that health services should be guided by fully informed choices made by patients/caregivers, and that patients'/caregivers' strengths and capabilities should be recognized (Allen & Petr, 1998). Despite the fact that family-centered conceptual frameworks have been developed for the adult population in health care and that caregiver involvement in adult rehabilitation is recognized (Degeneffe, 2001); there remains much to understand about caregiver involvement in adult inpatient TBI rehabilitation (Foster et al., 2012) and how approaches to research can become more family-centered.

Not only does a case study approach provide an opportunity to better understand caregiver involvement in TBI rehabilitation, but it is also a research approach that is congruent with family-centered theory, potentially allowing us to enhance the level of family-centeredness within given research settings. By using a case study approach, researchers can ensure that a variety of caregivers' perspectives are included across cases as well as within cases (Creswell, 2013). They are able to include multiple individuals who influence patients' recovery, including family members,

friends, and significant others and value them as important sources of information. A case study approach also enables the use of a variety of data collection methods (e.g., in-depth interviews, review of diary entries) that provide caregivers with a medium through which to openly voice their views and concerns about TBI rehabilitation processes and their involvement in them. The use of such methods may provide caregivers with a sense that their voice is being heard and that they have much to offer in terms of advancing the understanding of caregiver involvement in TBI rehabilitation. Finally, a case study approach can exemplify the unique perspectives and situations of each patient and their caregiver(s) and potentially illuminate the reality that patients' and caregivers' priorities can often vary according to their age, the nature of their injuries, and the families' demographic characteristics. Not only is this uniqueness an important component of family-centered theory, but it can also illustrate similar or varying perspectives on caregiver involvement in inpatient TBI rehabilitation.

Conclusion

In this paper, we demonstrate how a qualitative case study approach is well suited for exploring caregiver involvement in inpatient TBI rehabilitation. We explain how it can allow us to address the unique context of inpatient TBI rehabilitation, account for the complexity of caregiver involvement, adapt research to the practical and ethical needs of TBI inpatients and their caregivers, and create research that is congruent with family-centered theory. Health care is recognized as a complex organization that is continuously evolving (Walshe, Caress, Chew-Graham, & Todd, 2004) and as such, case study research has the ability to address these complex changes by acknowledging the importance of context in research. It also encourages the inclusion of many data sources and the use of various data collection methods. For research on caregiver involvement in inpatient TBI rehabilitation, a case study approach can consider the complexity of interactions and the interdisciplinary makeup of rehabilitation settings and their programs. Moreover, it is congruent with the characteristics of inpatient rehabilitation settings and practices where a patient and his/her caregiver(s) each play a unique role and together, are viewed as a unique case.

Researchers have developed many approaches to investigation over the years, but none have considered their congruence with family-centered theory, which is instrumental to

the TBI rehabilitation context and in understanding caregiver involvement. Case study research provides an opportunity to better understand caregiver involvement in such a way that is congruent with family-centered theory. Family-centered theoretical concepts can help guide the design of the study as well as the data collection and analyses. By reflecting on a qualitative case study approach, this paper contributes to research methodology and begins to build on the very limited body of literature on how best to investigate caregiver involvement in adult inpatient TBI rehabilitation. To fully recognize both the strengths and limitations of using a qualitative case study approach to investigate caregiver involvement in adult inpatient TBI rehabilitation, we need researchers who are willing to use it in their studies and then reflect on and publish their experiences. As such, the lead author of this paper is currently using a qualitative case study approach to better understand caregiver involvement in adult TBI rehabilitation and will reflect on her use of this unique approach.

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Declaration of Interest

The authors report no declarations of interest.

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The Value of Summer Studentships to Help Shape Undergraduate Career Trajectories

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Résumé :

(traduction)

Le niveau d'éducation peut avoir un impact significatif sur le risque de maladie et est considéré comme étant l'un des déterminants de la santé. Les expériences d'apprentissage de qualité, à l'intérieur et à l'extérieur de la salle de classe, peuvent encourager les étudiants à poursuivre des études supérieures. Ces expériences pourraient aussi faciliter toutes améliorations sur le développement personnel et avoir un impact de façon indirecte sur leur perception de l'avenir, leur motivation et leur état de santé. Ainsi, les étudiants ayant vécu des expériences d'apprentissage positives auraient plus de chance d'être en bonne santé mentale et physique et d'être motivés à appliquer leur apprentissage afin d'avoir un impact sur la santé et le bien-être des autres. Les stages d'été forment une part intégrante de l'orientation des étudiants vers les sciences et la médecine, les guidant dans leurs choix de carrière. De nombreux étudiants trouvent que les placements d'été sont bénéfiques car ils offrent l'opportunité d'appliquer leurs connaissances apprises en salle de classe au monde réel afin de mieux les préparer à la vie après les études de premier cycle. Le présent commentaire vise à informer les étudiants intéressés par les études médicales des avantages et désavantages des stages d'été, et à offrir des recommandations pour surmonter les défis rencontrés durant ces stages et, enfin, à les encourager à poursuivre ces opportunités pour qu'ils puissent compléter leur éducation des compétences nécessaires pour aider les autres dans l'avenir.

Mots-clés :

Bourses, éducation, premier cycle, médecine, formation, apprentissage expérientiel

Abstract:

Education level can have a substantial impact on disease risk and is considered a determinant of health. Quality learning experiences, both in- and outside the classroom, may encourage trainees to pursue higher education. Consequently, this could facilitate improvements in personal development and indirectly impact their outlook, motivation, and health status. Thus, students who have positive learning experiences may be more likely to have improved mental and physical health, and be motivated to apply their learnings in a way that positively impacts the health and well-being of others. Summer studentships are an integral part of stimulating students' interest in science and medicine, and can direct future career endeavours. Many find summer placements beneficial as they give trainees the opportunity to apply classroom knowledge to real-world settings in order to better prepare them for life after undergrad. This commentary aims to inform aspiring medical students of the pros and cons of summer studentships, provide advice on how to overcome challenges they may be faced with during their work term, and encourage trainees to pursue these opportunities to further complement their education so they can develop the necessary skills to help others in the future.

Keywords:

Studentships, education, undergraduate, medicine, training, experiential learning

Summer studentships are similar to scholarships, but involve paid work on a research project throughout the course of the summer (Wikipedia, 2014). These opportunities are generally made available to students at varying education levels for several reasons including, stimulating students' interest in research, encouraging students to pursue graduate studies or research careers, allowing students to gain an appreciation for the intricacies, nuances and ethics of scientific exploration, and affording students the opportunity to apply knowledge learned in the classroom in real-world settings. As a third year student, I was given the chance to complete a four-month co-op work term at the Ottawa Hospital in the Division of Maternal Fetal Medicine. As a research assistant I was involved with several clinical research activities that resulted in an academic publication. Thus, it is these experiences that form the foundation from which this essay is based.

Working in a tertiary care academic centre offers many rewarding experiences, however, there are several challenges one will likely be forced to overcome. Some trainees may be intimidated at the onset of their studentship as they may feel inadequate in comparison to other employees who have much more experience and a wider range of learned skills. This is normal given the fact that summer students are younger and less educated and does not mean that trainees hired in the studentship program are unable to make any contribution or difference. If this was the case they would not have hired you. In fact, a piece of advice to others entering a similar position would be to remain confident in your own abilities and skillset, and be aware that your coworkers and supervisors are cognizant of your experience level. One should not succumb to the 'imposter syndrome', a term used to designate an internal experience of intellectual phoniness (Clance & Imes, 1978). All summer students should remember that they are an integral part of the research team, and are given tasks and objectives based on their training level. It is important to remember that a supervisor will not assign projects which are beyond students' capabilities. It is through the team's unity and mentorship that trainees will begin to feel a sense of belonging and realize that they are in fact deserving of the research position. Personally, I felt that I made an impact within Division especially after I developed a functional database of more than 700 twin pregnancies that staff physicians, researchers, and trainees can use in the future.

Although there will be variation in how each summer student perceives and then describes the value of their experi-

ence, it is without question that good mentorship and a challenging work environment will help build confidence, and eventually lead to feelings that a true contribution was made. Evidence of a successful summer program was demonstrated by Cleland et al., who explored the benefits of studentships at the University of Aberdeen for undergraduate medical students. They also assessed the impact of the program in guiding the participants to pursue academic medicine. Students participating in this program completed a questionnaire and personal reflections. At the end of the study the results were clear – the trainees reported that the summer studentship program was a positive learning experience that helped them learn new skills, gain insight into medical education and research, facilitated team work and camaraderie among staff, and had the added benefit of academic publications or presentations (Cleland et al., 2010).

Summer studentships can be further described as educational opportunities that offer an academic experience outside of the classroom. Many will perceive this different learning environment as a refreshing change. This summer studentship was my first introduction to the rigours and ethics of clinical research – something that all health science undergraduate students should become familiar with. By learning to critically appraise and evaluate research, trainees will be able to directly transfer critical thinking skills to the lab portion of their coursework and indirectly to the lecture portion as they evaluate the content presented and try to interpret its quality and validity within context of the course objectives. Furthermore, good advice and mentorship are invaluable with respect to quality summer programs and the indirect benefits they may provide. Having a supportive mentor outside the classroom can create opportunities for future research (i.e., securing a senior thesis supervisor) and employment (e.g., networking, meeting, and liaising with potential employers for future coop placements/paid work). Overall, undergraduate students should consider not only the direct opportunities presented by the studentship, but also consider how quality and positive interpersonal relationships between the student and mentor can facilitate current and future success.

Summer students will be required to overcome an immense knowledge barrier. This is exactly what happened to me as I familiarized myself with work done in the Division of Maternal-Fetal Medicine and scanned existing literature on several topics of personal interest. Trainees should realize that it is essential to spend time investigating your in-

terests before deciding on a research topic, as the bulk of your placement will be dedicated to this specific area. So it will be more valuable if you find it interesting. It is also essential to consider how your current research project aligns with your future goals as a trainee and with your career goals post-graduation. While you will likely change directions in some capacity, it is important to initiate your research experience in an area of personal interest as it could set you up on an accelerated trajectory with respect to future educational and career opportunities.

Medical and scientific jargon can be intimidating and familiarization with the language used on a day-to-day basis can be most helpful. Exposure to the technical language used by physicians and other health care professionals on a daily basis helped me get acquainted with the work done in the Division of Maternal-Fetal Medicine. I was constantly challenged and learning something new. It is this type of experience that is likely common to a diverse array of studentships where trainees will not only gain valuable work experience but will also acquire a tremendous amount of knowledge comparable to that obtained in a didactic learning environment (e.g., the classroom).

As the summer came to an end and I started to see the research projects I was assigned to come to fruition, it became obvious that I had a very unique experience that was important for both my personal and academic growth. At the beginning of the summer, like many undergraduate students early in their academic careers, my knowledge regarding clinical research was limited. After reviewing literature and meeting with scientists and physicians it came to our attention that there was a lack of consensus regarding significant predictors of adverse neonatal outcome in fetal Gastroschisis (a complex abdominal wall defect in the fetus). To reconcile this I published a literature review on the topic to inform the future design of a research project to address the shortcomings in the literature. Moreover, our team completed the database on twin pregnancy to determine the relationship, if any, between fetal nuchal translucency (a predictive ultrasound marker of fetal health in early pregnancy) and neonatal weight. This project will help with the early identification of adverse outcome in twin pregnancies. Lastly, I explored the literature and engaged in personal reflection regarding the role of summer studentships in guiding the direction of undergraduate career trajectories (I wanted to share my experience with others). By the end of summer, after capitalizing on the many learning opportunities, my work resulted in 3 academic peer-reviewed publications. This

alone was significant for my academic growth as the submission and peer-review process truly developed my critical thinking and research skills. More importantly, however, this placement facilitated my personal growth and enhanced my confidence. Collectively, it became evident that the skills obtained throughout my studentship would increase the chance that I would obtain future research placements – and for this I am extremely grateful.

As an aspiring medical student, being able to work amongst physicians and health care professionals fostered my confidence and reinforced my desire to pursue undergraduate medical education. I had the opportunity to shadow my supervisor in the operating room and observe a caesarean section of a twin pregnancy; a defining moment that helped me realize that medicine is truly a calling to help others. Research for those directly involved with medical education, academia, scientific exploration, etc. has many far-reaching benefits beyond publishing manuscripts and/or delivering research presentations. It became clear that for these individuals this is a life passion and quest for the unknown with a focus on human health.

Overall, studentships and research placements offer many intangible and indirect benefits. These include: learning to keep clear, detailed, and accurate notes, understanding the importance of transparency in the scientific writing process, recognizing that it is essential to remain ethical when collecting data and interpreting the analysis, highlights the value of understanding diagnostic techniques used on a daily basis, and enhancing one's awareness and understanding of the scientific process for those who plan to continue researching in their careers (Collier, 2012). The notion of transparency is a core foundation of medical research and it requires the need to be explicit, clear, and open about the methods and results (Hiles, 2008). This is essential, particularly in medical research where scientific integrity is vital. If information is incompletely or falsely reported, ambiguity may arise in the application of the research which could lead to non-evidence-based practice and adverse patient outcomes.

Summer studentships are highly valuable employment opportunities that all undergraduates should be encouraged to pursue. These beneficial experiences provide unique exposure to science and medicine, and can help reinforce one's desires, motivation, and drive to pursue higher education. Not only do studentships provide relevant experience in a field of interest, they also develop intangible skills that cannot be developed in the classroom. This idea has

been explored extensively in the literature and echoes my feelings. One example includes a study that aimed to evaluate the value of real world experience to learner employability. Ehiyazarayan et al. (2009) suggest that certain skills are more effectively developed in a real-world environment rather than in the classroom but these workplace skills can be enhanced when integrated back into a classroom setting.

Summer studentships in a fast-paced academic environment requires the trainee to adapt and quickly develop critical thinking and research skills that can be of great use when completing an honours thesis project or after graduation when commencing one's career. In order to capitalize on studentships, it is important for junior trainees to ensure they work in a field of interest to them, as anywhere from four months to a year will be devoted to learning and expanding upon the employers' specific interests. My advice to aspiring students looking to apply for and complete a studentship is to remain confident in your abilities and to not get discouraged when presented with complex tasks. Break down your perceived problems into manageable daily tasks, ask questions when necessary, and learn from other staff, students, and employees to ensure a comprehensive educational experience. Do not take the opportunity for granted and make the most of your studentship. Trainees should feel comfortable learning from those around them and try to absorb as much information as possible. After all, learning from experts, enhancing your scientific literacy, and improving your confidence will be intangible lessons you can carry forward throughout life, independent of the career path chosen.

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Electronic Health Records: Patient Care Quality

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Résumé :

(traduction)

L'avancement de la technologie et son intégration dans une grande variété de domaines a un impact important sur le domaine des communications. Malgré la crainte que l'introduction des technologies de l'information rend la pratique de la médecine plus impersonnelle, son implémentation a un effet positif sur la qualité des soins. On réfère à l'échange d'informations sur la santé par moyen électronique, tel que les dossiers de santé électroniques, par les technologies de l'information de santé, domaine au centre un important effort de recherche. De nombreux supporteurs de ces technologies promeuvent les bénéfices qui leur sont associés : comme l'augmentation de l'efficacité du stockage d'informations et un accès plus facile. D'autres sont plus hésitants, argumentant que la confidentialité et la sécurité de l'information sont remises en question. Des études ont démontré que malgré ces scrupules, une fois l'intégration complète, la qualité des soins augmente.

Mots-clés :

Technologies de l'information pour la santé (TIS), santé, qualité des soins aux patients, dossier de santé électronique (DSE), relation médecin-patient

Abstract:

The advancement of technology has led to its integration in widespread fields, heavily impacting areas such as communications. While there is concern that the introduction of information technology into healthcare renders the medical practice impersonal, its implementation has a positive effect on patient care quality. The exchange of health information via an electronic medium, such as the electronic health record (EHR), is known as health information technology (HIT) and has been the focus of many studies. Many supporters of HIT promote the benefits associated with the general rise in technology, such as the increase in convenience and efficiency of information storage; but others are hesitant, often citing privacy and security breaches as primary concerns. Studies show that despite various initial qualms about EHR integration, once the integration is complete, the quality of patient care increases.

Keywords:

Health information technology (HIT), healthcare, quality of patient care, electronic health record (EHR), physician-patient relationship

Introduction

The twenty-first century has seen the incorporation of technology in many areas of society, including the healthcare system. Not only does technology allow potential for more effective treatment options, but also for more efficient management systems through healthcare information technology. As Koufi et al. (2013) acknowledge, personalized medicine is optimizing the integration of healthcare information technology (HIT). Tools like electronic health records (EHR), which consolidate social care and genetic data, and clinical decision support systems, are envisaged as having pivotal roles in realizing the individualized approach to healthcare (p. 740). However, a spectrum of legal and ethical reasons may hinder the integration of future EHRs due to security and privacy concerns (p. 740). While there is concern that the introduction of EHRs to healthcare renders the medical practice impersonal, its implementation allows for a positive effect on the quality of care received by the patient.

Methods

The purpose of this article is to elucidate the relationship of a particular form of HIT –specifically EHRs. As a function of modern technology and a facilitation of information transfer, there should ideally be open-armed acceptance of EHR integration; however, scepticism rests in the safety and privacy concerns associated with its implementation. Varying studies dating across the last decade, which analyze the EHR implementation, will underscore and reveal the current and predicated relationship between the EHR integration and the quality of patient care being delivered and received. Thorough analysis, not simply localized in individual hospitals but across nations will help to clarify the position and stance of integral healthcare workers and patients on the role and image of EHRs in the medical field.

Results and Discussion

EHRs currently perform a distinctive role in the healthcare system by relating all aspects of patient care from the diagnosis, prescriptions, and clinical results in an integrated patient data file (Koufi et al., 2013, p. 741). The potential of EHRs to achieve a personalized era of medicine is far from exhausted if it can connect to assistive patient medical de-

vices, provide access to social care organizations, and extract information from gene databanks (p. 741).

Although the potential of EHRs has been demonstrated, there also exists the potential for privacy and healthcare issues. One prominent issue is the concern over increased likelihood of patient privacy breaches (Doyle et al., 2012, p. 603). As access to electronic information increases, there is concern that there will be an increase in the number of privacy breaches that can target that information (p. 603). The increased use of technology may serve as another barrier to the physician-patient relationship by degrading the intimacy of the relationship, deplete economical resources and place privacy constraints on the healthcare system given the time and energy needed to change the current practices (Davis et al., 2012, p. 240). Physicians and patients alike often cite electronic media as not only physical barriers between the patient and the physician during the appointment, but also as a distractor that may divert attention away from the physician's focus as well as the physician-patient interaction (Davies et al., 2012).

Despite reluctance to adopt health information technology due “to fear of change and fear of disruption to the physician-patient relationship,” the electronic health record serves as “a valuable tool for providing efficient medical care and improving health care” (Doyle et al., 2012, p. 601). Unlike numerous studies qualifying this technological integration, which are often post hoc surveys, a study by Doyle et al. (2012) offers a comparative pre-post approach: two sets of physician qualitative interviews conducted prior to and following the installation of computers and EHRs. This method allows for analysis of the progression of the physicians' perspectives on their interactions with patients.

Initially, Doyle et al. (2012) found that physicians expressed concerns about “possible breaches of patient confidentiality” and “decreased eye contact” (p. 603-4) negatively affecting the physician-patient interaction. By the second set of interviews, concerns about privacy and confidentiality seemed to have largely dissipated and physicians felt that the EHR served as a communication and collaboration tool with patients (p. 605). They found that “not only had the expected benefits been realized but also the benefits had exceeded in many cases” (p. 606) due to the availability of education resources which allowed for the sharing of online medical treatment plan decisions with patients (p. 601). As well, after a multi-nation study, Davis et al. (2012) conclude the following findings indicating:

Greater IT functionality or enhanced office IT systems is associated with physicians' feeling well prepared to manage patients with chronic diseases, greater adherence to clinical guidelines, being able to document and follow-up on adverse events, being responsive to patients, and feeling that their ability to provide quality medical care has improved over the past five years. (p. 246)

This analysis of the former and current state of EHRs is significant in projecting the long-term implications of its incorporation. It suggests that there are many benefits to be realized with EHR integration.

Another area to consider is the financial responsibility associated with the integration of EHRs. As Davis et al. (2012) observe, in areas such as the UK, where the federal government has “established standards, financed, and implemented information technology, nearly all physicians (90%) have electronic medical records, and 83% of physicians report high IT functionality” (p. 246). By contrast, slow adoption or the absence of standards and major financial commitments to HIT by hospitals has been shown to be associated with a failure for physicians to be promptly informed about patient care needs (p.246). The substantial investments in healthcare information technology by the government and hospitals are further indications of the growing consensus on the potential salutatory effect of EHRs on the quality of patient care (Restuccia et al., 2012, p. 1). As noted by Olsen et al., (2014) installation and maintenance of HIT systems, such as EHRs, require some investments, but the amount saved from avoiding paper handling has made such systems profitable. Many prescriptions and updates can now be sent via email and electronic medium thus decreasing the environmental footprint and economic burden in this area. Additionally, gains in the administration and data quality fields have been made (p. 158). The transition to a fully electronic data management healthcare system has obvious advantages regarding cost, data quality, feasibility, and accessibility of information. The initial transition may require time and adjustment; however, the money that will be saved has already made the shift into making these health information technology systems profitable (Olsen et. al, 2014, p. 161).

EHRs, as a facet of healthcare information technology, facilitate collaborative physician-patient relationships. Interestingly, Doyle et al. (2012) are able to demonstrate, through their study, the effect of this technological integra-

tion by analyzing the before and after conditions, illustrating how the physician perspective changed drastically with the implementation of EHRs (p. 246). Benefits of the EHRs seem to not only include the efficiency of these computerized medical records, but also its role as an education tool in increasing the patients' ownership of their own treatment plans. Consequently, while the incorporation of healthcare information technology may surface from a management objective, it demonstrates more significantly the improved quality of patient care that is given and received. Ultimately, the benefits of health information technology integration need to be considered from the perspectives of the patients receiving care.

While the interest in HIT has been in largely directed at improving health care quality, its effect on the quality of care received in hospitals is relatively understudied (Restuccia et al, 2012, p.1). Restuccia et al. (2012) conclude that hospitals with high levels of healthcare information technology implementation, such as EHRs, engaged in a statistically significant increase in patient satisfaction and care quality. This was associated with a greater number of quality improvement strategies and patient satisfaction assessments (p.1).

Statistical analysis of the front-line clinicians' assessments of care, as well as the patients' assessments of the quality of care, was conducted by collecting data from over four hundred hospitals and performing regression analysis on six performance measures of patient care quality (Restuccia et al., 2012, p. 6), to determine the effect of health information technology application. By examining a cause and effect analysis of EHR implementation, a positive association between the activities of healthcare information technology and hospital satisfaction was identified. This large-scale investigation uses the EHR operation as a predictor of its integration success, which allows for a direct relationship to be established, but stifles the understanding of the mechanisms being used under EHR operation. It can be observed that implementation success extends beyond the personal physician-patient relationship to include its acceptance by the entire healthcare system as a whole (Restuccia et al., 2012, p. 7).

Efficiency, perhaps one of the most lauded benefits of technology, has shown to be significantly increased with health information technology incorporation. There is evidence that due to clinical information systems, the collection, analysis, and integration of patient experience data have become more effortless for physicians. “Almost half (46%)

of physicians with high information capacity practices report routinely receiving data on surveys of patient satisfaction and experiences of care” (Davis et al., 2012, p. 244). This was concluded after analysis of surveys across seven nations. The surveys established the common finding that there is greater physician satisfaction as a result of increased ease of patient management through documentation and clinical follow ups while using health information technology (Davis et al., 2012, p. 246). Contrary to initial concerns, humanization of the healthcare system with health information technology is underscored as a broad overview of the features of HIT that can be realized, offering insight into the direct physician-patient relationship.

Intriguingly, Davis et al. (2012) are able to expand on the discussion by analyzing quality of care through three distinct areas: management, patient safety, and responsiveness to patients (p. 240). By accounting for qualitative factors such as different types of patients and illnesses, Davis et al. (2012) investigate the direct effect that incorporating health information technology has on patients in the context of the varying consequences that different environments have on healthcare information technology implementation. This suggests that the incorporation of EHRs is not simply a singular event, but one that requires a developed framework adapted to variability in the specific context and needs of the environment. Regardless, additional developments are needed in nearly all countries, “particularly linking information across sites of care” (p. 246), as this may undermine transitional care with primary care physicians failing to be promptly informed about patient needs following hospitalizations. Consequences of costly re-hospitalizations can be avoided with better health information technology systems. The health care sector has been a laggard in the adoption of information technology in comparison to other industries (Middleton, 2005, p. 1270), as physicians have been mainly concerned about the utility of doing so, yet the potential benefits of information technology to the healthcare system are clear (Davis et al., 2012, p. 246).

There is legitimacy to be drawn from the nature of the privacy concerns, but they can be addressed with growing awareness and action toward a malleable architectural framework for the healthcare information technology system (Koufi et al, 2013, p. 741). An example of such a system is proposed by Koufi et al. (2013): a three-tier model, where different aspects of the patients’ data are accessible by their respective entities and organizations while adhering to a specific security policy so that all bodies are gov-

erned under practices of standard confidentiality and security for safeguarding protected health information (p. 742). The system generates a unique patient number, which is registered in the EHR and enables its transfer from one system to another. Validation checks are run against patient numbers, and patient data is made accessible to the treating physician, nurse, and other parties involved (Olsen et al., 2014, p. 159).

Conclusion

Effectively, a balance must be achieved between the integration of HIT through EHRs and the policies that are introduced for its smooth and successful transition. The concerns and benefits of health information technology need to be consolidated. As demonstrated by many studies, the apprehen about healthcare information technology integration are valid but serve to moderate the benefits of HIT. It is important, however, to recognize that these issues should not be debilitating and they should not prevent the realization of health information technology development and improvement. The concerns should only manifest cautious and planned execution of EHR policies that can accelerate the spread and use of information technology and the mechanisms for exchange of health information among healthcare providers. Ultimately, the context of health information technology integration will serve a major role in not only impacting the services that it renders, but also its successful incorporation and viability in maintaining and improving the healthcare system.

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The Unpredictable Prognosis of Medicare - A Book Review on Chronic Condition: Why Canada's Health-Care System Needs to be Dragged Into the 21st Century by Jeffrey Simpson

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Mots-clés : Services de santé, assurance-maladie, politique de santé, réforme des soins de santé

Keywords: Health services, Medicare, health policy, health care reform

Canadians cherish their health-care system. In fact, polls reveal Medicare is among the top most important national symbols and takes part in defining what it means to be Canadian (Mendelsohn, 2002). Why is it then, that Canada has one of the most expensive health-care systems, but some of the worst health outcomes when looking at comparable country's health systems? (Skinner & Rovere, 2012). A politicians' worst financial nightmare is formed when health-care budgets exponentially outgrow government revenues and calls for more efficient services compete with an intolerance for higher taxes. Incorporating the demographics of an aging population and the restrictions on privately funded health-care services supports why the subject is not a very popular one (Simpson, 2012).

Jeffrey Simpson, a long-time Globe and Mail columnist and public-policy expert does a brilliant job in scrutinizing these issues from several angles, supporting his claims with sound evidence. Readers will find their attention captured and retained as Simpson articulates his frustration well on the matter. He believes that the system needs to be improved.

Simpson opens the book with his first hand health-care system experiences while shadowing the Ottawa Hospital's chief of staff, Dr. Jeffrey Turnbull. The current problems within Medicare, such as long wait times and lack of available beds, are described from the patient's perspective. This perspective sets up a clear illustration for which the rest of the book attempts to assess why these problems are so difficult to improve and where barriers currently exist.

Next, Simpson briefs the reader on the political history and development of Medicare in Canada. This background demonstrates a clear lack of evolution in the system. The

Saskatchewan Medical Care Insurance Act of 1962 arrived during the province's time of need, at the disapproval of many physicians who were looking primarily for user fees. The pressures of user fees and privatizing medical services were driven to termination with the introduction of the Canadian Health Act in 1982. However, as the cost of health-care continued to increase, Simpson alludes to the idea that without any changes to the system or implementation of user fees, there will not be enough funds to support the increasing costs. This still continues to be an issue in Canada today. The author argues that the state must determine a new funding source for the increasing costs, if not from higher taxes or cutting social programs.

Simpson then provides elegant reasoning for why Canadians have been erroneously led to believe that their health-care system is among the greatest. Canada's neighbouring health-care system, the American system, is to blame and is amongst the worst in the world. He claims that a comparison between these two countries creates two problems. The first problem being the newfound illusion that Canada's health system is very efficient, whereas in reality it ranks average in many areas according to the 2010 OECD results. Secondly, Simpson reasons that Canadians are fearful of any changes made to their system because they fear it would become more American or "two tiered" (publically and privately co-funded). This makes any changes involving aspects of privatizing services seemingly impossible. In addition, Canadians want more money to go into health-care but do not want increased taxes. For politicians, these are the hard decisions and essential changes that need to take place to relieve health-care costs.

Halvorson (2007) offers an interesting and supplementary view on the subject of the comparison between these two

healthcare systems. He considers the Canadian healthcare system measures to keep its costs low as drastic and atypical. These measures include setting fee schedules for physicians, annual budgets for hospitals, and prices for prescription drugs, which may be unfeasible and too difficult to implement in the US. Long surgery and treatment wait times along with a deficiency in timely technological advancements are believed to have suffered from drastic and atypical Canadian cost-cutting measures. Halvorson discusses how the American two-tier system and the Canadian single-payer system are on opposing spectrum ends of healthcare funding models, and that the Americans should look to other middle of the spectrum healthcare systems found in Europe. Healthcare systems in France and England for example have more successful two-tier healthcare systems through finer balances between private and public co-funding arrangements. These French and English style arrangements are more realistic and achievable for the American system because they would require less drastic changes. In comparison, the changes required for a complete transformation into a single-payer healthcare system like the cherished Canadian healthcare system would be a much more daunting undertaking.

An update on the American healthcare reform with albeit unknown outcomes, is the implementation of the Patient Protection and Affordable Care Act also known as Obamacare in 2010. Obamacare bears resemblances to the non-European style Swiss healthcare system, which does not use a single payer system but mandates that all citizens purchase insurance on a private market (Chaufan, 2014).

Dr. Robert Ouellet, a radiologist and private medical imaging clinic operator and owner based out of Quebec added a relevant comment to this issue and the need for reform upon becoming the Canadian Medical Association president in 2008. “Nobody wants to privatize the [Canadian] system like it is in the US,” he [said], adding that every other health care system in the world has a mix of public and private delivery and that nobody has copied Canada’s single payer system” (Silversides, 2008).

Subsequently in his book, Simpson sensibly argues that Canada should be compared to similar international systems for more just comparisons. These countries include Sweden, Britain, and Australia. These evidence-based comparisons clearly show where Canadian weaknesses exist and what options Canada has for enhancing their system. In the midst of his negative reflections, it is worth mentioning against Simpson’s opinion that Canada does in fact hold the 14th rank in life expectancy around the globe

(Central Intelligence Agency, 2014).

Life expectancy, according to the World Health Organization, is an indication of the overall mortality of a population. It summarizes the mortality patterns that exist across all age groups (World Health Organization, n.d.). Life expectancies have experienced dramatic increases during and since the 20th century. Of those born in 1900, almost no one lived past 50 years of age. These increases in life expectancy around the globe haven been attributed to a decline in death due to infectious and parasitic diseases, improved sanitary conditions and the establishment of public health measures. Specific examples within these domains include the development of antibiotics, access to clean drinking water and the introduction of population wide vaccine programs, respectively (NIH National Institute on Aging, 2011). These achievements have all occurred in the Canadian context (Clark, 1990). Therefore, Canada’s 14th rank in life expectancy in the world (Central Intelligence Agency, 2014), should not be undervalued as it does reveal that Canada is a relatively healthy place to live with a respectable health care system when looking from a global perspective.

A 2005 paper by Marchildon justifies the comparison of the Canadian healthcare system to the Australian system through demonstrating the similarities between the two countries and finishes with some take-home lessons for Australia from Canada. Both countries are closely high-ranked among the wealthiest OECD countries and spend a substantial amount of their economy on public health care. Over the last three decades the two healthcare systems have both undergone significant structural reform and have moved towards hierarchical management structures and network organizations to govern hospitals. Questions regarding access, quality, and culturally relevant services exist to better serve the large remote and rural areas found in these countries as well as their aboriginal populations. While both countries have a mix of public and private co-funding, the Australian system has a complete parallel private tier of institutions and physician care, in which very few Australians question or doubt. The public funding of the Australian healthcare system is also federally centralized and since the 1950s it has been administering a prescription drug program as well as primary physician care. Marchildon concludes by suggesting that the Australians could learn from the Canadians on non-traditional citizen engagement and that future Australian health care reforms should reflect the views and values of the general public.

Overall Simpson’s book does a thorough job in bringing the

public's attention to the current issues on the Canadian health-care system. This awareness and the accompanying suggestions by Halvorson, Ouellet, and Marchildon would never be brought forward by politicians in such strength due to the fear of losing Canadian trust on a sensitive subject. What does the future hold for Canadian Medicare? Simpson argues that the future must include changes and none of them will be easy. These changes will be essential in maintaining a functioning health-care system and ultimately, a healthier Canadian population.

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Ebola en Afrique de L'Ouest : L'Impact des Déterminants Sociaux

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Résumé :

Depuis plus d'un an, l'Afrique de l'Ouest fait face à la plus importante épidémie d'Ebola de son histoire. Cet essai présente les divers déterminants sociaux de la santé qui ont eu un impact sur l'ampleur de cette crise. L'environnement, la culture, et les services de santé sont les facteurs prédominants du développement de cette épidémie, qui a fait des milliers de morts. Ces déterminants ont joué un rôle tant dans le déclenchement de l'épidémie et la transmission du virus, que dans l'étendue de celle-ci. Depuis plusieurs années, il est admis que les déterminants sociaux sont des facteurs essentiels dans la prévention des problèmes de santé. En effet, travailler sur ces facteurs permet d'améliorer en amont les capacités des communautés et les conditions de vie des populations, ainsi que de réduire les inégalités sociales en santé. Il est donc important de les considérer afin de permettre l'endiguement de la crise et prévenir une autre catastrophe.

Mots-clés :

Ebola, Afrique de l'Ouest, épidémie, leçons, inégalités de santé, transmission, infections, fièvre hémorragique, *Zaire ebolavirus*, Médecins Sans Frontières (MSF), responsabilités sociales, équité

Abstract:

(traduction)

For over a year, West Africa has encountered the most important epidemic of Ebola in its history. This essay presents the various social determinants of health that have had an impact on the extent of this crisis. Environment, culture, and health services are the predominant factors that influenced the development of this epidemic, causing thousands of deaths. These determinants have played a role in the trigger of this epidemic, the further transmission of the virus as well as its regional expansion. In fact, working on these factors has allowed improvements in building the capacity of these communities and in their life conditions, reducing social inequalities in health. It is, therefore, important to consider them in order to allow the containment of this crisis and to prevent another catastrophe.

Keywords:

Ebola, West Africa, epidemic, lessons, health inequalities, transmission, infections, hemorrhagic fever, *Zaire ebolavirus*, Doctors Without Borders, social responsibility, fairness

Le 6 décembre 2013, dans un petit village de Guinée, un jeune garçon tombait malade; il présentait les symptômes de la fièvre hémorragique Ebola et a été la première victime de ce qui est maintenant la plus complexe et dévastatrice épidémie de cette maladie (The Lancet, 2014; Rid & Emanuel, 2014). Avec un taux de létalité se situant entre 30 et 90%, ce virus a des conséquences graves (Liu, 2014). Les plus récentes estimations des *Centers for Disease Control and Prevention* (Centers for Disease Control, 2015) décomptent 27 055 personnes infectées¹ et 11 142 décès, pour la région de l'Afrique de l'Ouest à elle seule. Cette 25^e épidémie d'Ebola aura ainsi fait plus de victimes, en seulement quelques mois, que la somme de toutes les épidémies précédentes dans le monde (The Lancet, 2014). Alors que le nombre de nouveaux cas décroît, une interrogation face aux causes de celle-ci et aux facteurs sociaux responsables de son ampleur est de mise (Médecins sans frontières, 2015).

Pour bien comprendre cette épidémie, l'objectif de cet essai est de comprendre l'étiologie et d'analyser les déterminants sociaux ayant joué un rôle dans le développement de celle-ci, tels que les facteurs sociaux, environnementaux et culturels, ainsi que les services de santé.

Premièrement, la crise actuelle est causée par le *Zaire ebolavirus*, de la famille des *Filoviridae*. Le principal réservoir naturel de ce pathogène, considéré comme un facteur biologique, est la chauve-souris frugivore africaine, qui transmet le virus à l'homme lors d'un contact étroit avec les tissus ou les liquides biologiques d'un animal infecté (Organisation mondiale de la santé (OMS), 2014). La chaîne de transmission d'humain à humain se forme lorsque les liquides biologiques d'un malade entrent en contact direct avec les muqueuses ou les plaies d'une autre personne (Vidal, 2014). Toutefois, il est généralement considéré que les cas de transmission d'animal à humain sont rares (University of Oxford, 2014).

Deuxièmement, outre les éléments biologiques, de nombreux facteurs environnementaux, culturels, politiques et économiques sont responsables de l'ampleur de cette crise, en raison de leur influence sur la chaîne de transmission et sur les mesures d'endiguement de l'épidémie (OMS, 2014). D'ailleurs, plusieurs communautés africaines sont en contact rapproché avec les chauves-souris à cause de la déforestation, mais aussi parce que les humains s'en nourrissent et les commercialisent. En effet, bien que la viande de brousse (*bushmeat*) ait été reconnue comme un facteur des épidémies précédentes, celle-ci reste une source de nourri-

ture encore répandue en Afrique. Cela est dû, d'une part, à l'absence d'autres options alimentaires et, d'autre part, à une tradition ancestrale encore très présente dans la culture africaine (Phillip, 2014; Holt-Giménez, 2010). Parallèlement, les pays les plus touchés par la crise, soit la Guinée, le Sierra Leone et le Libéria, souffrent d'un manque aigu de ressources, ainsi que d'infrastructures sanitaires adéquates. Ces pays possèdent d'ailleurs très peu de personnel médical qualifié (OMS, 2006; 2014; Kinfu, Dal Poz, Mercer & Evans, 2009; Gueye, 2005), ce qui rend l'endiguement des épidémies difficiles. À titre d'exemple, les 11 millions d'habitants de la Guinée n'ont accès qu'à 1000 médecins. Pourtant, il s'agit de l'un des pays ayant la plus faible pénurie de médecins (Gostin, 2014). D'un côté, les gouvernements africains manquent d'aide internationale afin de pouvoir suffisamment investir dans l'amélioration des services, l'achat de matériel médical et la formation du personnel, ou détournent cette aide à d'autres fins (Organisation de Coopération et de Développement Économiques (OCDE), 2009, p. 62 et 323). En effet, selon un rapport de l'OCDE (2009), malgré les nombreuses organisations œuvrant sur le terrain, les divers fonds d'aide humanitaire et le partage des connaissances ou du personnel qualifié étranger, plusieurs pays africains n'ont pas réussi à réduire les inégalités sociales au sein de leur communauté, ni à améliorer les conditions de vie de leur population. D'un autre côté, les nombreux conflits armés, qui ont ravagé la région, ont détruit les infrastructures et rendu la population réfractaire aux autorités (United Nations Environment Programme, 2006).

Finalement, les communautés africaines traditionnelles sont méfiantes face aux autorités sanitaires, ce qui engendre des obstacles à la prise en charge des malades et aux méthodes efficaces d'endiguement. En fait, plusieurs Africains craignent le personnel médical, parce qu'ils croient que celui-ci répand les épidémies et la mort ou simplement parce qu'ils ne croient pas à l'existence du virus (BBC, 2014; York, 2014; Onishi & Fink, 2015). Par conséquent, les familles soignent leurs proches malades à la maison, puis s'occupent des rites funéraires. Cette pratique a de graves impacts sur la transmission, puisqu'aucune protection contre les contacts directs avec le corps de la personne décédée n'est utilisée. Enfin, le développement de médicaments engendre des coûts importants et doit être rentable pour l'industrie pharmaceutique. Par contre, les gouvernements africains ne peuvent y contribuer financièrement, et donc il n'existe encore aucun traitement ou vaccin qui soit efficace et sécuritaire (Brady, 2014; OMS, 2014). Certains traitements et vaccins ont été testés dans les derniers mois,

ce qui peut laisser entrevoir un certain optimiste pour de futures crises, puisque ceux-ci permettraient de mieux les gérer et même de les prévenir (OMS, 2014; 2014)

En conclusion, l'épidémie actuelle d'Ebola a été causée par de nombreux facteurs, mais surtout par l'absence de ressources sur le terrain, la pénurie de personnel médical, les pratiques culturelles traditionnelles et un manque d'efforts de la part de la communauté internationale. Une intervention axée sur la sensibilisation de la population aux risques de transmission, pour diminuer les pratiques traditionnelles risquées et réduire la méfiance, et sur une formation adéquate du personnel médical sur le terrain, pour permettre une prise en charge rapide des nouveaux cas, ainsi qu'une fortification et un investissement dans les infrastructures offrant des services de santé pourraient grandement influencer l'issue de futures épidémies.

Notes

[1] Le nombre de cas rapportés est différent du nombre de cas confirmés, puisque celui-ci inclut tous les cas suspects. De ce fait, le nombre de cas confirmés n'est pas utilisé ici, puisqu'il ne reflète que les personnes qui ont eu accès aux tests diagnostiques et sous-estime le nombre total de victimes.

[2] Ce rapport a été publié par l'OCDE, la Banque africaine de développement et la Commission économique des Nations Unies pour l'Afrique

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