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Life Goals in Vision Rehabilitation: Are They Addressed and How?

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Abstract: This study explored if and how vision rehabilitation services address important life goals of young and middle-aged adults who are visually impaired. It found that services that teach functional skills and offer psychosocial therapeutic-type services were instrumental in addressing life goals and that independence-related goals were most often addressed, but leisure-related goals were least often addressed.

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Vision rehabilitation services, such as clinical low vision services and mobility training, have generally been found to have beneficial effects on the functioning and well-being of people who are visually impaired (that is, those who are blind or have low vision) (Birk et al., 2004; Reinhardt, Horowitz, Raykov, MacMillan, & Brennan, 2004). But little is known about if and how these services address life areas or goals that are important to people who are visually impaired. Life goals are defined as "desired states that individuals seek to obtain, maintain, or avoid by means of cognitive and behavioral strategies" (Emmons, Colby, & Kaiser, 1998). As an important motivational force, life goals contribute to health and well-being (Emmons, 1986, 1989). Facing a chronic illness or disability

often means that the pursuit of important goals is either disrupted or blocked. There is evidence that interference with life goals can result in a significant interruption of the daily routine and can lead to emotional distress (Wheeler, Munz, & Jain, 1990). This may be especially true during young and middle adulthood, since chronic illness is likely to interfere with the pursuit of important life goals (such as those related to career and/or the support of a family) that are typical of these life stages (Nurmi, 1992).

Because of the strong link between a person's ability to pursue certain life goals and well-being, it is imperative for rehabilitation programs to focus their interventions on aiding persons with a chronic illness or disability in the successful pursuit of life goals. Research on people with neurological disabilities found that these individuals attached great significance to partner and family relationship-related life domains; however, relationship-related life domains or goals are not typically included in defined rehabilitation goals for people with neurological disabilities (McGrath & Adams, 1999; Sivaraman Nair & Wade, 2003). Similarly, a study of young and middle-aged adults with visual impairments, aged 22-64, found that in addition to functional aspects of living, relationship-related goals were a top priority. Functional goals were more commonly addressed in vision rehabilitation than were relationship goals. However, in the rare case in which relationship issues were addressed in rehabilitation, it was generally perceived as helpful (Boerner & Cimarolli, 2005). These constitute important insights, especially when one considers that the perceived correspondence of rehabilitation goals and life goals may not only enhance a person's motivation to participate in rehabilitation because it makes the intervention relevant to the person's life, but is likely to result in more successful rehabilitation outcomes (Sivaraman Nair, 2003), which, in turn, could be associated with better well-being.

Unfortunately, few studies have attempted to identify the

perceived benefits and effectiveness of vision rehabilitation in relation to how vision rehabilitation services may or may not address clients' life goals or life areas that are important to them. Specifically, whether and how various vision rehabilitation services address different life goals of young and middle-aged adults who are visually impaired remain unanswered. Hence, the specific purpose of this descriptive study was twofold: to investigate whether and how vision rehabilitation services, in general, addressed life goals and to uncover specifically how the different types of vision rehabilitation service programs addressed various other goals.

Method

PARTICIPANTS

The participants were 47 adults with visual impairments aged 27-64 (M = 53, SD = 10). Fifty-five percent (n = 26) were women, and of the 46 who reported their race/ethnicity, 59% were white (n = 27), 28% were African American (n = 13), 9% were Hispanic (n = 4), and 4% were of other races (n = 2).

The participants for this cross-sectional study were recruited from a pool of 126 adults with visual impairment aged 22-64 who had been first-time applicants at a vision rehabilitation agency serving the greater New York metropolitan area and whose cases were closed at the agency prior to contact. Other criteria for inclusion were the use of vision rehabilitation services, age of onset of visual impairment at 18 years or older, living in the community, fluency in English, and the absence of cognitive or hearing deficits that could interfere with the telephone interview. Thirty-four of the 126 individuals who were contacted could not be reached even after numerous attempts, 12 were non-English speaking, 2 were cognitively impaired, 6 had not received any vision rehabilitation services, and 25 declined to participate; thus, 47 participated in the interview, resulting in a response rate of 65% (based on those

who participated and those who refused to participate). The data were collected by trained interviewers in telephone interviews that lasted approximately 30 minutes. All the study procedures and materials were approved by the Institutional Review Board of Lighthouse International, and the participants were asked for oral consent after being read an informed consent form outlining the details of the study procedures, potential risks and benefits, and use of data.

MEASURES

Life goals assessment

The participants were asked to list their three most important life goals using the following script: "Now, I would like you to think about the goals, plans, and areas of your life that are the most important to you. These could include things that you would like to happen, as well as things you would like to maintain or avoid. Thinking of the goals that are important to you at this time, which would you consider to be the three most important?"

Use of vision rehabilitation services

The participants were asked to indicate (yes or no) if they had received any of the following vision rehabilitation services: low vision services, career services, mobility training, rehabilitation instruction, counseling, or support-group services. The following questions were used: (1) "Did you ever receive low vision clinical services by an optometrist or ophthalmologist who may have prescribed optical devices, such as magnifiers, or who may have prescribed electronic devices, such as computers or CCTVs for reading?" (low vision services); (2) "Did you ever receive help with finding a job or retaining a job, which may have included technology and/or computer training?" (career services); (3) "Did you ever receive help with learning new ways of traveling safely in the community and around your home?" (orientation and mobility training); (4) "Did you ever

receive help with learning techniques to remain independent at home, at work, and in the community, such as using contrasting colors and tactile markers to be able to cook safely or to locate things?" (rehabilitation teaching); (5) "Did you ever meet individually with a professional, such as a social worker or a psychologist, who provided help with understanding and dealing with your feelings around vision loss?" (counseling or social services); and (6) "Have you ever participated in a support group where you met with other people with vision problems to talk about your situation?" (support group).

Assessment of life goals addressed in rehabilitation

For each of the three life goals they mentioned, the participants were asked whether each of the different types of rehabilitation services that they had received had addressed a particular life goal. Then as a follow-up question, they were asked to explain how the goal was addressed or how it was not addressed by each service they received. For instance, if the participants mentioned a health-related goal, such as maintaining their health, and indicated that they had received low vision services, the following question was posed: "Do you feel that this goal of maintaining your health was addressed when you were receiving low vision services (yes or no)?" Then the participants were asked: "Can you please explain?"

PLAN OF ANALYSIS

First, a coding system for the various life goals was developed. Then, a coding system was developed for the open-ended questions about whether and how life goals were addressed by the different vision rehabilitation services. For the development of both coding systems, two independent coders reviewed the narrative responses of the first 20 participants to generate codes or common themes. After the coders agreed on this initial set of codes, they used the narratives of the next 10 participants to establish interrater agreement for both coding systems. The interrater agreement for the first round of coding of the life

goals was 89%; for coding whether and how the goals were addressed by services, the interrater agreement was 76%. All the data were coded by the two independent coders, and the remaining rounds of coding all produced interrater agreements of at least 80%. Disagreements were resolved through the discussion and refinement of coding themes and concepts. Both coders' opinions were equally weighed, and there were no disagreements that were not efficiently resolved through discussion. From the discussion, coding rules were delineated and recorded, so that these rules could be applied to the next rounds of coding.

Then, descriptive analyses were used to identify the frequencies of the three most important life goals identified by the participants, as well as the different types of vision rehabilitation services that were used. In addition, frequencies of whether and how goals were addressed by all the services combined and frequencies of whether and how all the goals combined were addressed by the different types of vision rehabilitation services were generated. Finally, frequencies and percentages of whether and how the different life goals were addressed by the specific services were examined.

Results

LIFE GOALS AND USE OF VISION REHABILITATION SERVICES

The most frequently mentioned life goals were health-related goals (n = 35, mentioned by 74% of the participants). Health-related goals included improving and maintaining physical health, as well as specifically vision-related health. The second and third most frequently mentioned life goals were work, career, and education-related goals, such as maintaining or getting a job, (n = 33, mentioned by 70% of the participants) and independence and mobility-related goals, such as remaining independent and being able to get around (n = 29, mentioned by 62% of the participants). Hobby and interest-related goals were

mentioned 17 times, or by 36% of the participants, and family and other social goals were mentioned 13 times, or by 28% of the participants. Family and other social goals included goals of starting a family and raising children.

The most common type of vision rehabilitation service received was a low vision examination (*n* = 42, 89%), followed by mobility training (*n* = 32, 68%) and rehabilitation instruction (*n* = 29, 62%). Less frequently received services included counseling (*n* = 18, 38%), career services (*n* = 16, 34%), and participating in a support group (*n* = 13, 28%). On average, the participants received about three services.

ADDRESSING LIFE GOALS IN VISION REHABILITATION SERVICES

The coding of the narrative responses showed that when a life goal was addressed in vision rehabilitation, two overarching themes emerged for how life goals were addressed by the various services: effectively or ineffectively. Then, the effective and ineffective categories were further broken down into several subcategories. In the case of a particular life goal that was not addressed, themes emerged for why it was not.

The categories of life goals that were addressed effectively were the following (with the number of times a particular category was mentioned across all life goals and services): (1) helped to accomplish daily tasks (such as reading and travel, *n* = 121); (2) increased motivation, emotional adjustment, and confidence (*n* = 59); (3) provided life guidance, direction, and resources (*n* = 16); (4) helped with social interaction and an enhanced social life (*n* = 11); (5) increased knowledge of the eye condition (*n* = 10); (6) inspired the pursuit of a new goal (*n* = 8); (7) acquired new job or academic skills (*n* = 8); and (8) optimized eye health (*n* = 7). Hence, rehabilitation services most frequently addressed life goals effectively to accomplish daily tasks and to increase motivation and emotional adjustment to vision loss.

Life goals were addressed ineffectively because of (1) the poor quality of services (*n* = 16), (2) not enough time spent on services (*n* = 4), (3) a mismatch between the client's needs and the goal of the service (*n* = 4), and (4) the client's inability to acquire skills taught by the service (*n* = 2). Consequently, the most frequent reasons mentioned for why rehabilitation services addressed life goals ineffectively was the poor quality of the service, not enough time spent on services, and a service-need mismatch. In addition, three categories emerged for how life goals were not addressed. The most frequent reason mentioned for why life goals were not addressed was that "the nature of the service could not address a particular goal" (*n* = 111), followed by "services occurred prior to the pursuit of a particular goal" (*n* = 43) and "services could not address the goal because the client did not mention the goal" (*n* = 33).

Table 1 presents the frequencies of the effectiveness of the different services across all the goals. Low vision, career, mobility, and rehabilitation services were more often perceived as effective in that they helped the participants to accomplish daily tasks, whereas counseling and attending a social support group were more often perceived as effective for having increased the participants' motivation and furthered their emotional adjustment. The services that focus on teaching functional aspects of daily life, such as low vision services, were also found to be effective in that they increased motivation and furthered emotional adjustment (although less often than counseling and attending a support group). Similar distribution patterns also emerged for the frequency distributions of the codes of effectiveness for each of the five life goals separately by the six services (not shown).

Table 2 shows the frequencies of ineffective services and goals that were not addressed by the different services across all the goals. The most frequently mentioned reason for why life goals for three services--low vision, career, and mobility--were being

rated as ineffectively addressed was the poor quality of the services. For low vision, mobility, and rehabilitation services, the most frequently mentioned reason for why life goals were not addressed effectively was that the nature of the service could not address the goal. For counseling and attending a support group, the two most frequently mentioned reasons for why a life goal was not addressed were that the nature of the service could not address the goal and the client did not mention the goal. Similar findings emerged for the frequency distributions of the ineffective and not-addressed codes for each of the five life goals separately by the six services (not shown).

Table 3 shows the frequencies and rates of how often a particular goal was addressed and the frequencies of how often a particular life goal was addressed either effectively or ineffectively by the different services. A rate of effectiveness (not shown) across all the services in addressing a particular life goal was calculated. This rate was conceptualized as the ratio of life goals that were addressed effectively and the total number of goals that were addressed. Specifically, it was calculated by dividing the total number of effectively addressed goals by the total number of effectively addressed and ineffectively addressed goals. The rate of how often a goal was addressed was calculated by dividing the frequencies of addressed goals by the total number of addressed and not-addressed goals.

It is not surprising that career goals were most often addressed by career services (78%). However, counseling services also addressed career goals 73% of the time, followed by low vision services (61%) and mobility services (52%). Overall, all the services taken together addressed career goals 56% of the time. When this goal was addressed, the rate of effectiveness across all the services was 87%. Independence-related goals were most often addressed by mobility services (92%), followed by career (75%) and support group services (73%). Moreover, independence goals were addressed 75% of the time by all the services, and when they were addressed, the rate of

effectiveness across all the services was 90%. Health-related goals were most frequently addressed by support group services (81%), followed by low vision services (69%). The rate at which health goals were addressed was 56%, and when these goals were addressed, the rate of effectiveness was 92%. Hobbies and leisure-related goals were most frequently addressed by counseling services (71%), followed by career (60%) and support-group services (60%). Overall, all the services taken together addressed hobbies and leisure-related goals 46% of the time, and when these goals were addressed, the rate of effectiveness was 84%. Finally, family-related goals were most often addressed by rehabilitation instruction (80%), followed by counseling services (75%). Overall, all the services taken together addressed family-related goals 56% of the time, and when these goals were addressed, the rate of effectiveness was 94%. Thus, it appears that independence-related goals were the most often addressed (75% of the time), whereas hobbies and leisure-related goals were the least often addressed (46% of the time). Regarding the effectiveness rates, when a particular life goal was addressed, it was generally perceived as having been addressed effectively, since the effectiveness rates range from 84% (for hobbies and leisure-related goals) to 94% (for family-related goals).

Discussion

This study explored the perceptions of young and middle-aged adults who are visually impaired as to whether vision rehabilitation services addressed their important life goals and how their goals were addressed by different services. First, it investigated if and how all the vision rehabilitation services combined addressed life goals in general. It found that when life goals were not addressed, the most prominent reason was that the nature of the service could not address the goal. This is an important finding because it shows that although vision rehabilitation services may focus heavily on teaching functional skills, they may not be adequately teaching clients how to apply

these skills when pursuing various important goals. It may be necessary for vision rehabilitation agencies to make the pursuit of life goals part of their curricula. For instance, when clients voice a family-related goal, such as raising their children, which the participants considered a challenge, rehabilitation teaching, which instructs individuals in how to perform many household tasks that are essential in rearing children independently, could be emphasized to clients as a way of achieving this family-related goal.

The study also showed that life goals were not addressed in certain instances because services occurred before the participants started to pursue a particular goal. This finding underscores the need for vision rehabilitation agencies to conduct follow-up meetings with their clients to determine if new goals have emerged and which services may be beneficial at a later time. Also, it was interesting to find that the participants reported that goals were not addressed simply because they did not mention them. Hence, service providers may need to inquire about the goals of their clients to determine which specific services would be most helpful for the clients in reaching a certain goal. Overall, both findings touch on the need to refine assessment methods to elicit self-reported, important life goals.

Second, the results demonstrated that when life goals were addressed, the most prominent reason given for why they were addressed effectively was that they helped clients to accomplish daily tasks. This finding is not surprising because, as was mentioned earlier, vision rehabilitation services focus mainly on improving functional ability. However, it is also intriguing that the second-most-prominent reason why services were judged to address life goals effectively was that they increased the clients' motivation and helped the clients adjust emotionally to vision loss. When life goals were addressed ineffectively, the most prominent reason given was that the quality of services received was poor. This finding underscores the importance of agencies

conducting surveys to determine clients' satisfaction with services, not only after services have been completed, but while the clients are still receiving services, so that necessary changes can be made during the service process.

Third, the study explored specifically how the different types of vision rehabilitation services addressed the most important goals. As expected, career goals were most frequently addressed by career services, but they were also addressed by counseling services. Independence-related goals were mostly addressed by mobility services, but almost as frequently by support-group services. Health-related goals were most often addressed by support-group services, followed by low vision services. Hobby and leisure-related goals were most frequently addressed in counseling, followed by support-group services and career services. Finally, family and social goals were most frequently addressed by rehabilitation teaching and counseling services.

Hence, it appears that therapeutic types of services, such as counseling and attending a support group, are instrumental in addressing life goals. They may be instrumental because it is in therapeutic services that clients are able to disclose important goals, which gives counselors and fellow support-group attendees the opportunity to respond accordingly. However, addressing these goals seems to be accomplished in combination with services that teach functional skills. For instance, in the case of family-related goals, rehabilitation teaching may help clients to accomplish tasks that are essential to maintaining family life, such as cooking, whereas counseling may help clients to discuss issues and gain inspiration to maintain family life.

The fact that both functionally related services and therapeutic types of services can address goals may mean that, to address life goals, clients need to receive a variety of services. Furthermore, when services, such as career services, are already formulated or designed to address a specific life goal, they tend

to be perceived as addressing this goal. This finding may suggest that it is necessary for services to be defined in terms of life goals. On the basis of the finding that the effectiveness rates for the various life goals across all services ranged from 84% to 94%, it appears that when goals are addressed by services, the goals are overwhelmingly perceived as having been addressed effectively. This finding again supports the view that vision rehabilitation services can be effective in addressing life goals.

Several limitations of the study need to be noted. First, this was an exploratory study that had a relatively small sample. Second, the study used purely descriptive analyses. Third, the study did not measure the effectiveness of services in terms of links to improved functional outcomes and psychological well-being. Thus, conclusions about the interrelationship between life goals and the outcomes of vision rehabilitation services need to be viewed as tentative, and the findings need to be replicated. However, the goal of the study was strictly to explore how services address or do not address different life goals, so the results can provide cues for service providers and may serve as a catalyst for future studies in this area.

RECOMMENDATIONS FOR VISION REHABILITATION PRACTITIONERS

Three preliminary recommendations for vision rehabilitation practitioners can be made from the findings of this exploratory, descriptive study. First, vision rehabilitation providers may consider using different assessment instruments to elicit the life goals of clients and to do so in the course of the service process, so they can address these goals while services are ongoing. Second, services focused on function, in combination with therapeutic types of services, may increase the likelihood of life goals being addressed during the service process. Finally, practitioners should be aware that when goals are addressed by vision rehabilitation services, they tend to be perceived by clients as being addressed in a highly effective manner.

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