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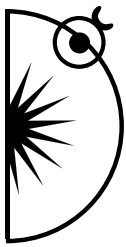

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The Explicit Attitude of Adolescents Towards Peers with Cancer

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Abstract
The social stigma of cancer is a powerful source of stereotyping and prejudice against people affected by oncology disorders. The research problem is presented in the following question: what is the formal and content characteristic of the stereotype of adolescents with cancer shaped by healthy peers. The cross-sectional included 2,370 high school students in Poland. The frequency analysis of open-ended descriptions and exploratory factor analysis of attributes representing basic domains of human functioning revealed that adolescent cancer patients were characterized in three domains: emotional, social, and physical appearance. Furthermore, cancer was linked with negative explicit prejudice. The obtained results and their practical implications are discussed in light of theories of stigmatization, stereotyping, and prejudice against people with cancer.

Keywords: cancer, adolescent, stigma, explicit stereotype, prejudice.

Introduction

In Europe, approximately 20,000 new cases of cancer are registered each year among adolescents and young adults (Steward & Wild, 2014). In Poland, from

1,000 to 1,200 new cases of cancer among children are registered, including approximately 200 cases among adolescents (Kowalczyk, 2011; Rogiewicz, 2015).

From the moment of diagnosis, a long-term treatment process begins involving the use of various methods such as surgery, radiotherapy, chemotherapy, etc. (Pizzo & Poplack, 2016). For example, treatment of lymphoblastic leukemia takes 104 weeks and starts with intensive chemotherapy (approx. 2–3 months), followed by consolidation (8–10 months). Together with the supportive treatment, the process takes two years.

For the patient, this means frequent and long-term hospitalization and lack of contact with peers. Furthermore, about 65% of adolescents experience long-term consequences of cancer and treatment, for example, neurocognitive dysfunctions, problem-solving skills, and motor functions, etc. Besides the spectrum of cognitive problems, there are psychosocial and behavioral side effects such as depression, risky behavior, and school absences, etc. (Armstrong & Reaman, 2005; Upon & Eiser, 2005; Wakefield et al., 2010; Donnan et al., 2015).

A typical adolescent cancer patient (ACP) loses two years of institutional education, and consequently, the possibility of systematic contact with friends, participation in school life, and recognition of the effects of their own and their classmates' behavior. Long-term absence is connected with a decrease in self-confidence and interest in schoolwork (Antoszewska, 2006; Binnebesel, 2002, 2012; Wakefield et al., 2010). Among children/adolescents with chronic illness, developmental and emotional difficulties and behavioral disorders are diagnosed three times more often than in the general population (Blackman et al., 2011).

Armstrong and Reaman (2005) argue that school education, maintained during the treatment period, increases the sense of life quality and is a positive predictor for a further educational career. However, while different teaching strategies may be implemented in hospital conditions (e.g., individual tutoring), an intensification of social bonds with classmates, which is so important in the above-mentioned developmental period (Shaffer & Kipp, 2013), seems unlikely due to hospital discipline.

Furthermore, cognitive, emotional, and behavioral disorders associated with cancer could harm the socially constructed image of ACP. Atypical behaviors, in turn, may weaken relations with peers even further, which in consequence may intensify feelings of isolation among ACP and hinder their recovery and social readaptation (Wiener et al., 2016; Kreitler, 2019).

Cancer stigma

Cancer marks and excludes, playing the function of a socially constructed stigma (Donovan, 2001; Johnson et al., 2014; Knapp et al., 2014; Fujisawa & Hagiwara, 2015). The term "stigma" refers to a deeply discrediting feature that reduces an individual "in our minds from a whole and usual person to a tainted, discounted one" (Goffman, 1963, p. 3). Such an attribute could also be called a failing, shortcoming, or handicap, which causes the marked person to be perceived as quite thoroughly bad, dangerous, or weak.

Assigning an individual to a group of cancer patients may lead to overestimate the traits schematically associated with stigma, for example, sudden changes in physical appearance caused by treatment, and at the same time to omit non-prototypical and less distinct characteristics, for example, related to cognitive functioning (Berrnberg et al., 2007; Dunn, 2015; Martinez et al., 2016).

Donovan argues that the term "cancer," "carried a powerful emotional message, promoting feelings of anxiety, fear and dread. If fear lies at the root of the stigmatization of cancer, then cancer is a fearful disease. Cancer is a mysterious, silent killer; its origin is unknown, and the few facts available are both ominous and terrifying. Cancer challenges not only a person's resilience to withstand disabling and invasive disease and disruptive and disagreeable treatment, but also confronts an individual with their tenuous hold upon life itself. Cancer forces us to look into the face of death against our reflexive instinct to look away" (Donovan, 2001, p. 246).

Accordingly, cancer triggers a series of conscious (controlled) vs. unconscious (automatic) cognitive, affective, and behavioral reactions (Fujisawa & Hagiwara, 2015; Sriram et al., 2015; Paradies et al., 2016; Liang et al., 2019). These reactions, as social psychologists (Ajzen & Fishbein, 1980; Dovidio et al., 2000; Aronson, 2009; Whitley & Kite, 2010; Barlow & Sibley, 2018) stress, define the attitudes of interaction partners and their individual and group identities.

Stereotypical beliefs about cancer patients

Cognitive reactions concern beliefs and a more or less accurate image of the interaction partner derived from these beliefs (Kunda, 1999; Aronson, 2009; Paradies et al., 2016). Considering hospital isolation, healthy observers can shape the image of cancer patients based on information of group affiliation and/or discrediting attributes with schematically linked traits rather than individualized

data (Rounds & Zevon, 1993; Simon et al., 2011; Fujisawa & Hagiwara, 2015; Martinez et al., 2016).

Category-based representation, due to a more limited empirical material is less accurate than a target-based one (Jones, 1990). Hence, a healthy observer, inferring about deep sadness of ACP based successive complaints, seems a better diagnostician than an individual that assumes the patient is petulant because he/she is seriously ill.

The source of category-based representations are data on the object's belonging to a specific group or class (Jones, 1990; Aronson, 2009; Whitley & Kite, 2010). At first contact, when information on the target is missing, the observer identifies the most striking features, for example, physical appearance, including health indicators such as thick hair, skin, and stains, etc., and on that basis generates a relative coherent interlocutor image. The observer will probably assume that Anna is a child that frequently cries, knowing that she is a 6/7-year-old girl with cancer (Stern & Arenson, 1989; Wiens & Gilbert, 2000; Drury et al., 2005).

Cognitive schemas causes that the target, which is assigned to a particular social category, is perceived as being similar to each other and the prototype of the group. Simultaneously, intergroup differences are exaggerated. Hence, the observer would assume that the majority of ACP are bald and sad, compared to healthy peers whose behavior varies with the changing situational context (Dovidio et al., 2000; Dunn, 2015; Martinez et al., 2016).

Prejudice against cancer patients

Cognitive, affective, and behavioral reactions interact (Storbeck & Clore, 2007; Koole, 2009). Let us consider attribution processes as an example. It turns out (Berrenberg et al., 2007; Marlow et al., 2015) that the power and content of an emotional response to stigma depends on where the observer locates the cause of the partner's defect. Therefore, AIDS, which is associated with sexual promiscuity, arouses more aversion than neoplasm, while melanoma or lung cancer, which can be explained by brazen sunbathing or smoking, generates more negative attitudes than pancreatic or bone cancer.

The analysis of attitudes towards representatives of various social groups should take into account the mutual interactions between cognition and affect. As Stangor argues "in addition to their cognitive components, our attitudes are based in large part on our emotional responses to social groups. Affect predicts attitudes as well or better than does, can influence, and indeed has a variety of

effects on stereotyping and prejudice, depending in part on the particular affect. The relationship between stereotypes (cognition) and prejudice (affect) is not always strong, but exists. This is reasonable, because affect and cognition represent different components of the same underlying attitudes, and because stereotypes are in part rationalizations for our prejudices" (Stangor, 2016, p. 6).

It follows that contact with cancer patients could induce anxiety and discomfort. On one hand, the personal/social standard suggests an inclination for conversation ("it is necessary to keep up the spirits of the ill person"), but on the other, there are doubts whether the patient should be disturbed by the interaction partner's presence (Dunn, 2015; Maitner et al., 2016). Moreover, ambivalence may result from a conviction regarding the fundamentally different experiences of the observer and patient, in light of which every question seems unsuitable. Therefore, spontaneous behavior in contact with the patient, which arouses disgust/anxiety or compassion, may be avoidance (Sriram et al., 2015; Liang et al., 2019).

Summarizing, stereotypical beliefs (cognitive element of attitude) on cancer patients could be linked with prejudice (affective element of attitude). Hence, a positively/negatively prejudiced observer could feel compassion and sympathy or anxiety and disgust, expecting more reflection and responsibility or dependency and complaints, etc., respectively, from cancer patients due to their unusual life experiences (Drury et al., 2005; Threader & McCormack, 2016).

The dual nature of stereotyping and prejudice against cancer patients

Information about cancer induces cognitive-affective schemas regulating attitudes towards patients (Stern & Arenson, 1989; Wiens & Gilbert, 2000; Fujisawa & Hagiwara, 2015; Liang et al., 2019;). Connectionist models of social reasoning and social behavior concern knowledge about the self and others as a semantic-affective network (Read & Miller, 1998; Fiske & Taylor, 2013). Activation of one concept (a node in the network) arouses related nodes, for example, cancer – sadness, sadness – alienation, and inhibits others, for example, sadness – joy (Kunda & Thagard, 1996; Kashima et al., 2008). The sum of arousal and inhibition of network nodes affects the shaped image (e.g. suffering child), affective reactions (confusion), and behavior (avoidance) to cancer patient.

The process of the network stimulation spreading can be explored thoroughly in the light of dual information processing theory (Greenwald et al.,

2002; Devine & Sharp, 2009; Fiske & Taylor, 2013). Available data, at the first level, could be processed unconsciously, and, consequently may be the source of equally automatic, and rapidly fixed cognitive, affective, and behavioral responses. The controlled information processing occurs at the second level, when the available data are critically analyzed and, if necessary, modified or rejected.

Accordingly, the "cancer" label automatically triggers schematic associations focusing on the most visible disease indicators (hair and weight loss, pale skin, etc.). Stereotypical image and linked affective reactions may be altered and corrected when the observer is motivated and has the appropriate cognitive tools, i.e., he/she is asked to do it and knows various aspects of cancer (Drury et al., 2005; Dunn, 2015; Fujisawa & Hagiwara, 2015; Liang et al., 2019).

Current study: Method

Objective

The study presented in this paper sought to determine the formal and content characteristic of the explicit stereotype of ACP shaped by their healthy peers.

Participants

The cross-sectional study was conducted in 84 high school classrooms located in a large industrialized region of southeast Poland. The sample involved 2,370 students (977 males) and it was organized under a convenience-voluntary sampling scheme (Gravetter & Forzano, 2010). The average age of participants was 17.416 years (SD = .921).

Considering personal experiences with cancer, 2.4% and 47.7% of participants declared that they or someone close had had it, respectively. The average number of relatives with such experience was 1.624 (SD = 1.167). This study was conducted from March to June 2019.

Materials and instruments

The data was collected using a tool developed by the authors of this paper –Stereotype of Adolescent with Cancer Questionnaire (SACQ). The SACQ[1] consists of three parts. The first contains questions about the participant – their sex, age, and personal experiences with cancer.

[1] Readers interested in the tool can ask for it writing to the authors' addresses: hanna.stepniewska-gebik@up.krakow.pl, slawomir.trusz@up.krakow.pl.

In the second part, used to assess explicit prejudice, participants are asked to imagine a typical adolescent with cancer, and then to provide 10 adjectives to describe the indicated individual. Next, they assess how negative or positive the adjective is on a scale from -3 (extremely negative assessment) to 3 (extremely positive assessment) and estimate the percentage of ACP with this attribute. The described procedure is consistent with the Esses et al. (1993) approach.

In the third part, used to assess the explicit stereotype, participants are asked to quantify 50 adjectives divided equally among five domains of human functioning, i.e., cognitive (e.g., intelligent), task-oriented (hardworking), social (sociable), emotional (optimistic), and somatic/physical appearance (bald). Adjectives are rated on a scale from 0 (no specific feature) to 6 (extreme in severity).

The first four domains were identified based on the Stereotype Content Model (SCM), proposed by Fiske and colleagues (Cuddy et al., 2008). The SCM assumes that the two basic categories of social perception content are warmth and competence. Warmth groups the characteristics of social and emotional functioning (e.g., fairness) that bring satisfaction to interpersonal relations. Competence represents the features of cognitive and task-oriented functioning (competent) relevant to the effectiveness of individuals' actions.

The last domain – somatic functioning/physical appearance – was considered because cancer could be associated with negative side effects of medical procedures used during treatment, for example, hair loss.

The adjectives in the third part of the SACQ were sourced from the Gough-Heilbrun Adjective Check List (Polish adaptation: Team of the Psychological Tests Laboratory of the Polish Psychological Association). Three judges assessed whether a specific feature was representative for the ACP stereotype (Krippendorff's alpha = .848 for the compatibility of assessments). Subsequently, the adjectives were assigned to the five above-mentioned domains of human functioning (Krippendorff's alpha = .720). Eventually, only unanimously assigned features were incorporated to the tool. In the case of physical appearance, based on the ACL and judges' quantifies, four adjectives were identified (healthy, weak, delicate, attractive). The other six were identified based on the papers on stereotypes and prejudices against cancer patients (Dunn, 2015; Drury et al., 2005; Simon et al., 2011).

The reliability of the third part of the SACQ was sufficient – Cronbach's alpha was .905 for all items, and .784, .794, .780, .887, and .798 for the covered domains.

Procedure

When arranging the study, the researchers sent an official letter to the principals of randomly selected high schools asking for permission to conduct a short survey in one class. The letter indicated that the survey concerned the "created image of an adolescent with cancer and factors influencing its content". It was also emphasized that "the collected data shall be treated confidentially and used only for scientific purposes." After obtaining permission, the questionnaire was completed by students in a randomly selected class. Students who did not agree to participate in the survey did not complete the questionnaire. Thus, involvement in the project was voluntary and anonymous.

Results

Structure and content of the ACP stereotype

The ACP stereotype was quantified in two steps. First, a frequency analysis (FA) of the open-ended descriptions proposed in the second part of the SACQ for describing ACP was performed. Second, a series of exploratory factor analyses (EFA, principal component analysis, varimax rotation with Kaiser normalization) were conducted on data from 50 adjective scales of the third part of the SACQ.

Open-ended descriptions. In total, students proposed 11,191 characteristics. To assess their importance, a weighted average was calculated for each attribute.[2] Table 1 shows twenty characteristics whose average exceeded 100.0.

Table 1. Frequency analysis results for proposed open-ended descriptions

Position	Attribute	Weighted average value
1	Sad	658.2
2	Weak	348.5
3	Bald	347.1
4	Pale	329.1
5	Sensitive	226.0
6	Quiet	200.0
7	Optimistic	163.5
8	Skinny	159.6

[2] According to the formula $\sum$ (number of specific attributes * their position in the list from 1 to 10 with a weight of 10 for the first position) / 10 possible positions in the list.

Table 1. Frequency analysis results for proposed open-ended descriptions

Position	Attribute	Weighted average value
9	Persistent	159.0
10	Reasonable	158.3
11	Withdrawn	151.8
12	Brave	147.7
13	Distraught	143.0
14	Silent	129.8
15	Bad	125.0
16	Mature	124.3
17	Amiable	122.1
18	Alone	119.9
19	Joyful	116.7
20	Calm	100.0

Source: Authors' research.

Respondents focused mainly on the emotional (45%, e.g., sensitive), social (30%, mature), and physical appearance/somatic functioning (20%, weak) attributes. What is particularly striking is the marginal role of task-oriented (5%, persistent), and total absence of cognitive functioning features.

Most of the attributes were negative (55%). The least favorable was physical appearance/somatic (100% of traits), followed by social (66%) and emotional functioning (33%). The obtained results revealed that the ACP stereotype was three-dimensional and rather negative.

EFA for adjective scales. Considering the assumed five domains model of the ACP functioning, the EFA was initiated with a five-factor solution. Unfortunately, the distinguished factors have proved to be uninterpretable – they were a conglomerate of traits representing different domains of functioning. The original five-component solution explained the 44% variance of the ACP image, with eigenvalues ranging from 11.164 to 1.342 (KMO test = .941 and Bartlett's $\chi 2(1225) = 32450.767$; $p < .01$).

Therefore, additional analyses were conducted, reducing the number of factors and verifying the reasonableness of the obtained solutions. Finally, a two-factor solution was accepted which explained 34% of the image variance. Table 2 presents the adjectives with loading factors below .60.

Table 2. Exploratory factor analyses results for adjective scales

Attribute	Factor	
	I	II
Ambitious	.713	
Gifted	.678	
Kind	.669	
Broad-minded	.666	
Persistent	.648	
Responsible	.644	
Wise	.640	
Cooperative	.637	
Intelligent	.627	
Well-organized	.623	
Emotional	.622	
Brave	.613	
Truthful	.612	
Bright/smart	.598	
Dark circles under the eyes		.706
With scars		.672
Weak		.654
Skinny		.643
Pale		.634
Swollen		.632
Bald		.600
Eigenvalues	11.164	5.485
Variance explained	22%	12%

Source: Authors' research.

The first, still uninterpretable factor linked the traits of four functioning domains: emotional (e.g., brave), social (truthful), task-oriented (ambitious), and cognitive (wise). In contrast, the second factor grouped only negative attributes of physical appearance (bald).

The ACP stereotype, constructed based on imposed characteristics, was one-dimensional. Respondents focused primarily on the physical, emphasizing the importance of the visible, external symptoms of cancer (e.g. hair loss). The

remaining characteristics, linking to the first factor, were a non-specific background for the second factor's attributes.

Explicit prejudice against ACP

Explicit prejudice was estimated based on ratings of the open-ended descriptions proposed in the second part of the SACQ. The ratings were weighted using the following procedure. To consider the power of association of the proposed attributes with the term "cancer," ratings were multiplied by the percentage of ACP possessing, in the opinion of healthy peers, the given attribute, and the products, depending on the position on the list, were given a rank from 1 to 10 (with a weight of 10 for the first attribute on the list: Esses et al., 1993; Dovidio et al., 1996).

It was assumed that an attribute assigned to 100% of the observed group members is more strongly associated with its representatives than an attribute specific to only 10%, and the characteristic indicated as the first one, i.e., "sad" is more strongly associated with the assessed category than "reasonable," the characteristic in tenth position. Moreover, it can be assumed that a respondent proposing only two features is less biased against a specific object than a person giving 10 attributes. Therefore, the sum of the weighted products was divided by the constant 10.

The obtained values ranged from -1,470 to 1,650, with the average of -6.153 (SD = 430.043) suggesting a rather negative bias, but with a little power. It was also checked to what extent explicit prejudice correlated with the five domains of ACP functioning assessed in the third part of the SACQ. All relations were significant and positive. The results for the cognitive, task-oriented, emotional, social, and physical appearance domains were: .261, .292, .295, .340, and .241, respectively.

Discussion of results

The aim of this study was to determine the formal and content characteristic of the explicit ACP stereotype. First, the findings revealed that depending on the data collection method and analysis, the respondents generated a three- or one--dimensional image of ACP. Considering the top of mind awareness index (i.e., the first associations with a specific object that come to mind, cf. Farris et al., 2010), ACP was portrayed using attributes of social and emotional functioning domains, and physical appearance. In contrast, the image based on EFA was one-dimensional and concerned characteristics of physical appearance (for the

interpretable factor) – the side effects of cancer. The stereotypical image emerging from these analyses was slightly negative.

In this study, compared to others (Stern & Arenson, 1989; Drury et al., 2005; Berrenberg et al., 2007; Martinez et al., 2016), what may be surprising is the omission of cognitive and task-oriented characteristics and ambivalent assessments of social and emotional functioning of ACP. The cognitive and task-oriented attributes were "ignored." Perhaps, for healthy peers, hospital is a place where intellectual competence and performance are the exclusive domain of medical personnel and not cancer patients, who are assessed as weak, sad, and distant (Wiens & Gilbert, 2000; Berrenberg et al., 2007; Simon et al., 2011; Martinez et al., 2016).

For healthy peers, ACP are physically ailing (e.g., weak), marked by illness (bald), and experience social-emotional conflicts in connection with the disease. On the one hand, the battle against cancer can be a source of ambivalent experiences (sadness vs. joy resulting from declining vs. improving health, respectively: Simon et al., 2011), and on the other, hospital rigor can intensify escapist tendencies (e.g. self-contained: Chambers et al., 2012; Johnson et al., 2014). On the other hand, the same circumstances may drive the development of positive personal characteristics in cancer patients (e.g. maturity: Threader & McCormack, 2016).

In contrast, the stereotype of a child receiving chemotherapy for cancer, described by Drury et al. (2005), contained positive attributes specific to cognitive (e.g., smart), task-oriented (well-coordinated), and social (friendly) functioning. Furthermore, in the Martinez et al. (2016) study, individuals with a history of cancer were rated lower in task-oriented and cognitive domains of functioning than in social and emotional (tolerant, warm, good-natured, sincere) ones.

The available research shows that the stereotype of a cancer patient is rather negative. Stern and Arenson (1989) found that children with leukemia were perceived by undergraduates and medical students as less sociable, cognitively competent, behaviorally active and well-behaved, physically potent, physically mature, as well as less likely to adjust to the future than their healthy counterparts.

Wiens and Gilbert (2000) revealed that college students rated children with cancer as being less sociable and physically powerful than healthy children. Finally, Dunn analyzed the beliefs of healthcare staff about people with cancer. She notes: "the caregivers consistently exaggerated the extent to which the patients were experiencing negative affect (depression, hostility, anxiety) compared to what the patients themselves reported" (Dunn, 2015, p. 45).

In contrast, Drury et al. (2005) demonstrated the cancer child stereotype significantly more negative than the socially shared view of a healthy child. Lower ratings were given mainly for external appearance (small, slow, weak) and emotions (sad), while comparable ones were provided for cognitive, task-oriented, and social features. Moreover, Drury et al. proposed a five-factor solution (sociability, degree of liking, future adjustment, physical potency, and judgments of the child), and Simon et al. (2011), based on unstructured interviews with healthcare professionals, reconstructed a three-dimensional image (unfavorable physical appearance, low emotional, and task-oriented functioning) with a huge prevalence of features characterizing the first domain.

In our study, depending on the method of material collection and analysis, a three- or one-dimensional solution was obtained. The discussed differences in solutions could be explained by cultural differences (Polish vs. American research context, cf. Shiraev & Levy, 2015), using other, (non)standardized tools (Ratings of the Child Questionnaire, unstructured interview, and the SACQ), and methods of data analysis (qualitative data analysis, frequency and exploratory factor analysis).

Second, it was found that explicit prejudice against ACP was slightly negative and as it decreased, the ratings of the whole range of ACP characteristics deteriorated. Nevertheless, the power and sign of attitudes could be influenced by personal experience of the disease, the number of known cancer patients, degree of kinship with them, etc. These factors were controlled in this study, but due to limited space, their impact was not discussed here.

Finally, it is necessary to consider the limitations of our study. The EFA has provided one-factor solution, and identified domain explained only 12% of ACP image variance. This finding combined with the result of frequency analysis of the open-ended descriptions suggests that the image shaped by healthy students is 1–3 dimensional and focuses on physicality, social, and emotional functioning of ACP. However, due to the surprisingly small variance proportion explained in the EFA, proposed image must be taken with caution. The extent to which obtained result reflects a population effect or it is a sample-specific shall be verified in subsequent replication trials.

Recommendations and educational applications

This study showed negative explicit attitudes of healthy students towards their peers with cancer. It is, therefore, worth recommending some educational procedures intended to overcome stereotyping and prejudice against ACP, and

consequently – their stigmatization and discrimination in school and peer group (Maitner et al., 2016).

Such procedures should contribute to transforming the negative sign of explicit attitudes of healthy peers, teachers, and parents into a positive one in the course of the actions promoting knowledge about (1) cancer and its specificity, (2) communication with a sick adolescent and his/her relatives, (3) patients' needs and their functioning during and after treatment, (4) readaptation at school after treatment, (5) providing support at school, and (6) coping with loss in the event of the death of a loved one (Binnebesel, 2002; Antoszewska, 2006; Daher, 2012; Wiener et al., 2016; Kreitler, 2019).

Furthermore, negative attitudes could be a source of harmful interpersonal behavior. Such behavior can be reduced by training observers to be reflective. The following questions serve this aim: (1) what situation is my sick classmate in?, what might he/she feel, think, need?, (2) with whom can I talk about my doubts concerning my classmate's disease?, (3) what made my classmate sick; is he/she responsible for the condition he/she is in or not?, and (4) how can I help my sick classmate?, etc.

For many years, anti-discrimination programs have been successfully implemented, benefitting members of minority racial, gender, age, etc., groups. The effectiveness of actions aimed at limiting the false hypothesis confirmation phenomenon whose source is teachers' prejudice against various groups of students, calculated in the last meta-analysis was Hodges' g from .30 to .38. This means that the engagement of teachers in such interventions improves the situation in approximately 65% of students compared to their peers whose teachers did not participate in such programs (de Boer et al., 2018). It cannot be ruled out that educational interventions concerning ACP may have a similar effectiveness.

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