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Analysis of Oncologists and Patients Communication During Different Consultations

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Abstract

Background: Oncologists-Patients communication plays a critical role in the provision and receipt of appropriate medical care. We sought to determine, in three different consultations, whether there were associations between oncologists' communication and patients' trust and awareness.

Methods: Study participants included 6 oncologists and 446 cancer patients with different type of cancer attending an oncology outpatient clinic at University of Naples (Italy). Patients' trust and awareness were measured using two questionnaires in three different consultations.

Results: A total of 446 patients agreed to answer the questionnaires, with a mean age of 54 years and 53% were females. Our results showed that female patients reported high trust in their oncologists and such high level of trust was linked to high education during all three consultations. In addition, we noted that patients' awareness was significantly correlated with patients' sex (female) and high education, during the first (T0) and the second consultation. We did not find such association during the third consultation (T12).

Limitations: Single-institution, small sample size for type of cancer.

Conclusions: These data suggested that high level of patients' trust in oncologists might increase the probability of cancer-directed therapy among cancer patients. Oncologists-Patients Communication is fundamental to tailor information and to enhance patients' understanding

Introduction

Cancer is a very complex disease, and it is perceived as a life-threatening illness by both patients and their families. Despite biomedical progress, successful treatment depends on different factors such as access to care, the complexities of the healthcare system, social support, effective management and good communication with multiple providers. After the abandonment of the paternalistic approach, it is important to underline that the relationship between cancer patients and oncologists has to be empathic to allow the patient to convey highly personal matters in a safe environment [1,2]. Many studies have shown that this communication is a very complex process that depends on the goals that doctors and patients try to pursue [3-5]. Therefore, the oncologist should establish a proper and deep relationship with patient to avoid failure or refusal of therapy [6]. In two reviews, the authors have suggested that patients' trust in their oncologists is correlated with both the optimistic acceptance of a vulnerable situation and the belief that oncologists will choose the best therapy [7,8]. As discussed in different reports, this relationship is considered asymmetric because of the patients' vulnerability, induced

by illness [7-9]. Different studies indicated that trusting patients were more satisfied [10-12] more adherent [13-15], more involved in decision making [15] and less inclined to request a second opinion [16,17]. However, individual characteristics, and personality traits of the patient can influence the oncologist-patient interaction [18,19]. Nevertheless, different studies reported that the task of the oncologist is not solely repeated truthful information but is also to consider the patient's vulnerable situation during the consultations [20-22]. For example, a qualitative study [23] indicated that the cancer patients trusted their oncologists when they understood very well their conditions since they had perceived to receive correct information about their disease and their treatment. However, some researchers suggested that preferences for the amount and type of information could vary among the patients. Naturally, the oncologists need to adapt their information during the oncological consultation in order to accommodate the different preferences among the patients [23,24]. D'Agostino et al. [25] reported that young adults patients preferred to have information about their treatment and infertility risks. In numerous cases, many patients preferred to find online information about their diagnosis. Some authors have demonstrated that 36% of melanoma patients were willing to have an online conversation with their oncologist, and 40% of patients with various cancers (lung, breast, cervix, testis, liver, pancreas, and colon) had online discussions

[26-28]. In line with these results, Helft et al. [29] showed that young cancer patient with high level of education preferred to have an online interview with their oncologists. However, some authors have pointed out that the cancer patients could increase their psychological distress when received too much information about their disease and treatment [30]. Two different studies, carried out in India and Korea, showed that distress was significantly less common in unaware patients of their cancer when compared with aware patients [31,32]. Other studies reported no difference between aware and unaware cancer patients with regard to psychological distress [33]. Conversely, other data demonstrate that exact information could improve treatment adherence, levels of satisfaction with care and decrease levels of psychological distress such as anxiety and depression [34-37]. Another study observed two groups of women with breast cancer: the first group had to undergo a surgery without option of choice (including a radical mastectomy and conservative intervention) during the intervention. In the second group, properly informed by the surgeon on various surgical options, the patients had an "option of choice". The cancer patients of the second group showed a lower level of anxiety and depression with respect to those of the first group [38]. In this context, patients who had detailed information about their cancer diagnosis, their treatment options, and their prognosis were more aware compared with those who had less information. For example, some authors demonstrated that patients underwent chemotherapy when they understood the benefits of therapy despite side effects [39]. Understanding some aspects if this relationship can be important to improve the ability of oncologists to give the right information. By means of thematic interviews, the main objective of this study is to investigate the possible association between oncologist-patient's trust and awareness.

Methods

Study design and participants

The study was approved by the Ethics Committee of the Medical Faculty of the University of Naples. All patients participating in the study gave written informed consent. This study was conducted between 2014 and 2016 in a sample of 446 cancer patients that was recruited from University of Naples. Participants provided information about their age, gender, marital status, education level. Details of cancer site, cancer stage, time in treatment and treatments received were obtained from patients' medical records (Table 1).

Characteristic	No.	Percentage (%)
Age/years		
Mean	54.54	
S.D.	11.23; Range=32-89	
<60	123	27.57%
>60	323	72.42%
Sex		
Female	238	53.36%
Male	208	46.63%
Marital status	**Male**	
Unmarried	170	38.11%
Married	258	57.84%
Divorced	18	4.03%
Education		
Less than high school	179	40.13%
High school and above	267	59.86
Employment		
Yes	240	53.81%
No	206	46.16%
Cancer type		
Stomach	30	6.72%
Lung	74	16.59%
Liver	42	9.41%
Colon/rectum	93	20.85%
Breast	77	32.35% (Female 238)
Cervix	36	15.12% (Female 238)
Pancreas	28	6.27%
Prostate	40	19.23% (Male 208)
Testicular germ-cells (TGCs)	26	12.5%
SEER stage		
In situ	196	43.94%
In situ and local	158	35.42%
In situ and distant	12	2.69%
Regional	47	10.53%
Distant	33	7.39%
Treatment received		
Surgery	57	130.04%
Chemotherapy	124	27.80%
Radiotherapy	16	3.58%
Surgery+Chemoterapy	181	40.80%
Surgery+Radiotherapy	15	3.36%
Chemoth+Radioth	38	8.29%
Nothing	14	3.13%

Table 1: Characteristics of participating patients (n=446).

Procedure

Informed consent was obtained from all individual participants included in this study. Prior to the initial oncological consultation. The questionnaires were self-administered after first consultation (T0), after 6 (T6) and 12 months (T12). Most of them filled out the questionnaire without help. Patients' trust in oncologists were

measured using single 5-point scales (Table 2). Furthermore, information preferences and treatment goals were evaluated in all cancer patients (Table 3) in the three oncological consultations.

N°.2	Questions	Score
1	How helpful is your doctor at explaining your medical condition(s)? 1) Extremely helpful 2) Very helpful 3) Moderately helpful 4) Slightly helpful 5) Not at all helpful	5 4 3 2 1
2	How well does your doctor explain how to occur your therapy? 1) Extremely well 2) Very well 3) Moderately well 4) Slightly well 5) Not at all well	5 4 3 2 1
3	How well does your doctor answer your questions? 1) Extremely well 2) Very well 3) Moderately well 4) Slightly well 5) Not at all well	5 4 3 2 1
4	How well does your doctor listen to you? 1) Extremely well 2) Very well 3) Moderately well 4) Slightly well 5) Not at all well	5 4 3 2 1
5	How much do you trust your doctor to make medical decisions that are in your best interests? 1) A great deal 2) A lot 3) A moderate amount 4) A little 5) Not at all well	5 4 3 2 1
6	Overall, are you satisfied with your doctor, dissatisfied with your doctor, or neither satisfied nor dissatisfied? 1) Extremely satisfied 2) Quite satisfied 3) Neither satisfied nor dissatisfied 4) Quite dissatisfied 5) Extremely dissatisfied	5 4 3 2 1

Table 2: Measures of experience and trust of disclosure in cancer patients.

N°. 3	Questions	Score
1	How likely do you think you will be cured of your cancer? 1) Likely 2) Almost likely 3) Unlikely 4) Very Unlikely 5) No idea/don't know	5 4 3 2 1
2	How important for you to know about your prognosis? 1) Extremely important 2) Very important 3) Somewhat important 4) A little important 5) Not at all important	5 4 3 2 1
3	Patients preferences for detail about cancer diagnosis and treatment 1) I want to hear as many details as possible 2) I want to hear the right amount of details 3) I prefer not to hear a lot of details 4) I prefer not to hear details 5) No idea/don't know	5 4 3 2 1

	Patients primary treatment goals	
	1) To cure my cancer	5
	2) To extend my life as soon as possible	4
	3) For me and/my family to be able keep hoping	3
	4) To lessen suffering as much as possible	2
4	5) To make sure I have done everything	1

Table 3: Information preferences and treatment goals in cancer patients.

Statistical analysis

We used a multinomial logistic regression (SAS software) to explore the relationship among patients' trust and awareness and the socio-demographic characteristics surveyed with the questionnaires. More specifically, in model named A, the variable trust (identified by the question q2.5 in the questionnaire) was the outcome and the socio-demographic characteristics were the predictors. In model B, the outcome was the variable awareness (identified by the question q3.2 and q3.3 alternatively in the model) and the socio-demographic variables were the independent variables. Both for the model A and B, the significant variables were identified with a forward selection at a significant level of 1%. The models were estimated at time T0 (first consultation), T6 (consultation after 6 months) and T12 (consultation after 12 months).

Results

Socio-demographic characteristics

At the time of the first visit, all patients filled out a brief socio demographic questionnaire. Among our patient sample (pts.=446), the mean age was 56 years (S.D. 11.76) and there were slightly more females (53.4% n=238) than males (46.6% n=208), respectively (Table 1). The 53.8% of participants were employed, and 35.6 were not employed and 10.5% were retired. Furthermore, the 40.1% of patients had a low education, while 59.8% had a high education (Table 1). The most common cancer type was breast cancer (32.5%) among the females' patients, followed by colon rectal cancer (20.8%) of the 208 male patients, 31.7% (n=66) were with prostate and testicular gem-cell cancers. Most patients had *in situ* local (79.3%), *in situ* and distant (2.6%), regional (10.5%) or distal (7.3%) cancers and they had received surgical, surgical/chemotherapeutical or surgical/radiological (57.16%) treatment (Table 1). All patients were informed about their diagnosis in accordance with their oncologists.

Patients' trust during the three oncological consultations (T0, T6 and T12)

In our model, all patients answered the questionnaire during the three different consultations (T0, T6 and T12) (Table 2). During the first consultation (T0), among the patients, 37% (pts. 168) trusted their oncologist "a lot", whereas 50% (pts. 223) and 12% (pts. 55) trusted their oncologist "a moderate amount" and "a little", respectively. Furthermore, the patients reported that their oncologist listened to them in this way: 27% "very much", 43% "moderately well" and 29% "slightly well" or "not at all well". After six months (T6), 37 patients (mortality rate 8.29%) had died, 2 patients were absent and 407 patients answered again the questionnaire. During this oncological consultation, 69% of participants (pts. 201) trusted their oncologist "a lot", whereas 24% (pts. 144) and 5% (pts. 62) trusted their oncologist "a moderate amount" and "a little", respectively. Furthermore, 49% said

that their oncologist listened to them "very much", 35% said "moderately well" and 15% said "slightly well" or "not at all well". Finally, after one year (T12), 87 patients (mortality rate 19,05%) had died and 359 patients answered the questionnaire. 78% of participants (pts. 263) trusted their oncologist "a lot", whereas 17% (pts. 62) and 3% (pts. 14) trusted their oncologist "a moderate amount" and "a little", respectively. Furthermore, 53% said that their oncologist listened to them "very much", 36% said "moderately well" and 10% said "slightly well or not at all well". Finally, we noted that the level of the patients' trust increased during the three consultations (37% T0, 69% T6 and 78% T12). Prognostic awareness and information preferences during the three oncological consultations (T0, T6 and T12)

In our model, all patients answered the questionnaire in three different consultations (T0, T6 and T12) (Table 3). During the first consultation (T0), the majority of participants affirmed that it was "extremely or very" (39% pts.154) or "somewhat important" (54% pts. 241) to know about their prognosis whereas the remaining 6% perceived that cancer diagnosis was "a little important" or "not so important" (pts. 31). Additionally, most participants (about 54% pts. 239) affirmed that they preferred not "to hear a lot of details" related to their cancer and its treatment, while 7% (pts. 32) preferred not to hear "details" about their cancer and its treatment (3% affirmed that they preferred not to hear "details" and 4% they answered "no idea/do not know"). In addition, approximately 36% (pts. 159) felt that they currently had "the right amount of information" about their prognosis and treatment, whereas 4% (pts. 16) wanted "to know more". During the second consultation (after six months), among participants (407) (37 patients had died and 2 were absent), the 66% (pts 266) of participants affirmed that it was "extremely or very important", to know about their prognosis. The 30% (pts. 123) affirmed that it was "somewhat important" to know about their prognosis, whereas the remaining 4% perceived that cancer diagnosis was" a little important" or not "so important" (pts. 17). A percentage of participants (about 27% pts. 111) affirmed that they preferred not to hear "a lot of details" related to their cancer and its treatment, while 4% (pts. 16) preferred not "to hear details" about their cancer and its treatment (2% affirmed that they preferred not to hear "details" and 2% they answered "no idea/do not know"). In addition, approximately 63% of patients (pts. 257) felt that they currently had "the right amount of information" about their prognosis and treatment, whereas 54% (pts. 23) wanted "to know more". After 12 months (T12), 359 patients participated to this oncological consultation, while 87 patients had died (mortality rate 19,05%). The 69% (pts. 251) of participants declared that it was "extremely or very important" to know about their prognosis. The 26% (pts.95) declared that it was "somewhat important" to know about their prognosis whereas the remaining 3% perceived that cancer diagnosis was" a little important" or" not so important" (pts. 13). The 19% of participants (pts. 68) declared that that they preferred "not to hear a lot of details" related to their cancer and its treatment, while 2% (pts. 7) preferred "not to hear details" about their cancer and its treatment (1% affirmed that they preferred "not to hear details and 1%

they answered "no idea/do not know"). In addition, approximately 72% (pts. 262) felt that they currently had "the right amount of information" about their prognosis and treatment, whereas 6% (pts. 22) wanted "to know more". Over time, we found a noteworthy rise in the number of patients that had the right amount of information about their prognosis and treatment (36% in T0, 63% in T6 and 72% in T12).

Statistical analysis

We used a multinomial logistic regression to explore the relationship among patients' trust and awareness and the socio-demographic characteristics surveyed with the questionnaires. More specifically, in model named A, the variable trust (identified by the question q2.5 in the questionnaire) is the outcome and the socio-demographic characteristics are the predictors. In model B, the outcome is the variable awareness (identified by the question q3.2 and q3.3 included alternatively in the model) and the socio-demographic variables are the independent variables. Both for the model A and B, the significant variables were identified with a forward selection at a significant level of 1%. The models were estimated at time T0 (first consultation), T6 (consultation after 6 months) and T12 (consultation after 12 months).

Our findings showed that trust in the oncologists was associated with patients' sex and high education, during the first consultation (T0). Female patients trusted more in their oncologists when compared to male patients and, also, the patients with a high education trusted more in their own oncologist with respect to the patients with a low education. Additionally, trust in the oncologists was also correlated with patients' sex (female) and high education during the other two consultations (Table 4 and 5).

Outcome variable	AIC	SC	-2logL	Test of the global null hypothesis: β=0 (likelihood ratio)			Analysis of the effects			
				Chi Square	DF	Pr>Chi Square	Effect	DF	Chi Square	Pr>Chi Square
Trust T0	1016.15	1065.35	992.15	130.6	8	<0.0001	Sex	4	50.06	<0.0001
							Education	4	51.61	<0.0001
Trust T6	915.14	963.25	891.14	73.92	8	<0.0001	Sex	4	26.15	<0.0001
							Education	4	32.35	<0.0001
Trust T12	725.1	760.05	707.1	61.36	6	<0.0001	Sex	3	23.18	<0.0001
							Education	3	28.35	<0.0001
Awareness T0 (q3.2)	870.55	919.76	846.55	87.87	8	<0.0001	Sex	4	38.57	<0.0001
							Education	4	38.79	<0.0001
Awareness T6 (q3.2)	792.47	840.57	768.47	31.63	8	0.0001	Sex	4	17.89	0.0013
							Education	4	9.8	0.0439
Awareness T0 (q3.3)	874.67	874.67	874.67	84.02	8	<0.0001	Sex	4	36.15	<0.0001
							Education	4	38.24	<0.0001

Table 4: Model A and B statistics of the estimated models (significant level: 0.01).

Outcome variable	Level of Trust (q2.5	Estimates			Standard error			P-value (Pr>Chi Square)			Odds ration		
		t0	t6	t12	t0	t6	t12	t0	t6	t12	t0	t6	t12
Intercept	1	-2.27	-28.85	-0.7	1.05	1179.2	0.53	0.03	0.98	0.18	-	-	-
Intercept	2	0.75	-0.28	0.47	0.37	0.46	0.38	0.04	0.53	0.2	-	-	-
Intercept	3	1.48	0.89	1.74	0.33	0.35	0.32	<0.0001	0.01	<0.0001	-	-	-
Intercept	4	0.64	1.66	1.75	0.37	0.33	0.62	0.08	<0.0001	0.005	-	-	-
Sex (M *vs.* F)	1	2.68	14.7	1.65	1.28	818.6	0.39	0.04	0.98	<0.0001	14.64	>999.99	5.76
Sex (M *vs.* F)	2	2	1.84	1.45	0.45	0.53	0.32	<.0001	0.0005	<.0001	7.38	6.31	5.25
Sex (M *vs.* F)	3	2.26	1.65	-2.77	0.35	0.34	0.68	<0.0001	<0.0001	<0.0001	9.55	5.22	4.29
Sex (M *vs.* F)	4	1.11	1.43	-1.85	0.39	0.31	0.42	0	<0.0001	<0.0001	3.04	4.19	0.06

Educ (H vs L)	1	-15.53	11.43	-1.73	502.2	848.8	0.36	0.98	0.98	<0.0001	0	>999.9	0.15
Educ (H *vs*. L)	2	-3.25	-2.93	-0.7	0.48	0.58	0.53	<0.0001	<0.0001	0.18	0.04	0.05	0.17
Educ (H *vs*. L)	3	-1.72	-1.82	0.47	0.37	0.39	0.38	<0.0001	<0.0001	0.2	0.18	0.16	5.76
Educ (H *vs*. L)	4	-0.97	-1.71	1.74	0.4	0.36	0.32	0.02	<0.0001	<0.0001	0.38	0.17	5.25

Table 5: Model A-Model's parameters estimates and the impact of socio-demographic variables on the trust.

As the model B, we observed that patients' awareness was significantly correlated with patients' sex (female) and high education, during the first consultation (T0-q2.3 and q3.3) and the second consultation (T6 only q2.3). Female patients were more aware about their disease when compared to male patients as well as the patients with high education were more aware about their disease with respect to the patients with low education (Tables 4 and 6). No significant association was found among awareness, sex and high education after 12 months (T12) since the patients were more likely to know their real disease stage and their therapy.

Outcome variables	Level of Trust (q2.5)	Estimates			Standard error			P-value (Pr>Chi Square)			Odds ratio		
		t0 (q3.2)	t6 (q3.2)	t0 (q3.3)	t0 (q3.2)	t6 (q3.2)	t0 (q3.3)	t0 (q3.2)	t6 (q3.2)	t0 (q3.3)	t0 (q3.2)	t6 (q3.2)	t0 (q3.3)
Intercept	1	0.24	-0.19	0.23	0.77	0.76	0.78	0.75	0.8	0.76	-	-	-
Intercept	2	0.19	-2.17	0.25	0.75	1.25	0.75	0.8	0.08	0.73	-	-	-
Intercept	3	3.03	2.3	3.03	0.6	0.51	0.6	<0.0001	<0.0001	<0.0001	-	-	--
Intercept	4	2.33	2.83	2.32	0.61	0.5	0.61	0	<0.0001	0	-	-	-
Sex (M *vs*. F)	1	3.24	1.37	3.14	0.96	0.81	0.97	0	0.09	0	25.48	3.94	23.12
Sex (M *vs*. F)	2	2.25	1.98	2.37	0.94	1.18	0.93	0.02	0.09	0.01	9.51	7.25	10.72
Sex (M *vs*. F)	3	2.24	0.51	2.21	0.77	0.47	0.77	0	0.28	0	9.36	1.67	9.14
Sex (M *vs*. F)	4	1.04	0.04	1.07	0.78	0.45	0.78	0.18	0.92	0.17	2.84	1.05	2.93
Educ (H *vs*. L)	1	-3.12	-2.74	-3.02	0.92	0.94	0.92	0	0	0	0.04	0.07	0.05
Educ (H *vs*. L)	2	-1.52	-0.55	-1.65	0.85	1.01	0.83	0.07	0.59	0.05	0.22	0.58	0.19
Educ (H *vs*. L)	3	-1.47	-1.29	-1.46	0.67	0.54	0.67	0.03	0.02	0.03	0.23	0.27	0.23
Educ (H *vs*. L)	4	-0.24	-0.6	-0.24	0.67	0.53	0.67	0.72	0.25	0.72	0.79	0.55	0.79

Table 6: Model B-Model's parameters estimates and the impact of socio-demographic variables on the awareness.

Discussion

A diagnosis of cancer is often perceived by the patient such a disease with uncertain course. Furthermore, the patient can be overwhelmed by the discussion of cancer staging and the complex therapy. For this reason, both the prognosis and the goals of the treatment could not be understood by the patients and many oncologists could be unaware of these misunderstandings. Different researches highlighted that patients' trust could be enhanced through non-verbal cues such as eye contact or facial expressions of oncologists [40]. Furthermore, the mounting use of computers during the consultations could create some problem, when the oncologist did not maintain eye contact with their patients [41]. In addition, some oncologist preferred to keep a physical distance towards the patient, and this behavior could be perceived by the patients in negative way [42]. Finally, the smiling within a medical consultation could transmit signals of trust and friendship to strengthen the relationship between oncologist and patient [43]. Collaborative communication could represent a mutual dynamic relationship, which involves the exchange of two-way information [44]

Although the literature underlines that a good communication can positively influence the outcome of the treatment, it is very difficult to understand which domains of communication are involved in this relationship. Moreover, different studies have found that an effective communication is associated with a decrease of patient concerns about treatment. Specifically, right information about the cancer and the treatment can help the patient to be more upbeat and have a better quality of life. Furthermore, patient's trust can be influenced by oncologists' ability both to listen them and to respond to their questions. Previous studies have shown that warm communication can reduce distress and trust and adherence to oncologist's recommendations [45]. In our study, during the three different oncology consultations, we examined the patients' trust in their oncologist in a sample of 446 patients. We observed that the trust was correlated with patients' sex and high education, during the first consultation (T0). Specifically, female patients trusted more their oncologists when compared to male patients. In addition, the trust was stronger among higher educated patients when compared with lower educated patients. We found the same positive association (the trust

with patients' sex (female) and high education) after six (T6) and 12 (T12) months. Furthermore we reported that the patients' level of trust in their oncologists increased during the second (T6 69%) and third (T12 78%) consultation, compared to that of patients during the first consultation (T0 37%). These data could suggest that the increased level of trust, during the second and third consultations, could be related with both increased patient self-reported health and the positive results obtained during the first year of treatment Finally, we found that the patients' perception about their oncologists' ability to listen to them increased during the second and third consultation (T6 and T12). These results seemed to be very interesting since oncologists spent more time with their patients in the second and third consultations (Figure 1 and Supplementary data Figure 1S). In this way, patients and oncologists knew each other better and therefore they were able to improve their relationship through an empathic communication. However, it occurred because the oncologists needed to listen more to their patients about their general health conditions, while patients had a great need to have more information about the efficacy of the therapy. Certainly, a good communication plays a crucial role to establish patient trust, and, can help patients to absorb information about prognosis and therapy. However, empathic communication is not sufficient to help the patients during the treatment, and an adequate social support is necessary to face important needs of the patients (symptoms, coping strategies, adherence to treatment recommendations). In this study we also analyzed the prognostic awareness of the patients during the three consultations. We found that 39% of patients wanted to know every detail about their prognosis, in the first consultation (T0), whereas we noticed that 66% and 69% of patients wanted to know every detail about their prognosis, in the second (T6) and third consultation (T12), respectively. Therefore, cancer patients had a strong preference that the oncologists gave them every detail about their cancer stage and their therapy before disclosing information to their family members. Moreover, our results showed a significant association between patients' awareness with patients' sex (female) and high education, during the first consultation (T0) and the second consultation (T6). We did not find such association after 12 months (T12), since we supposed that the patients were more likely to know their cancer and their therapy. The oncologists may help patients cope better with their cancer through clear and empathic discussions, However, the emotional burden cannot be discharged only on the oncologists because the cancer-patients meet different healthcare professions such as radiographers, radiologists, medical laboratory scientists, pathologists, psychology. A number of studies underscore most of cancer patients and their family suffered from psychological distress even when they were able to carry on with a reasonably normal life. The prevalence of psychological distress varies by type of cancer, time since diagnosis, degree of physical and role impairment, amount of pain, prognosis, and other variables. In Italy, psycho-oncology services have long been established in cancer institutes and in some hospitals and health agencies. The Italian Society of Psycho-oncology (www.siponazionale.it) has had an influence in enlightening the national institute about the need for psycho-social approach in cancer care. In the report on cancer rehabilitation promoted by The Federation of Cancer Patients Associations and supported by the Ministry of Health and Social Policy, the recommendation regarding the right of all cancer patients to receive proper psycho-social support was particularly stressed (www.favo.it). The National Cancer Plane 2010-2012 and the Ministry's document "Reducing the Burden of Cancer 2011-2013" have followed this recommendation (www.salute.gov.it). The way in which psycho-oncology service within

the national and regional/local health services should be routinely implemented, however, has yet to be determined [32]. Then, taking care of a cancer patients it means not only to provide the best therapy but to get help with emotional and spiritual problems during and after cancer treatment. A primary goal should include a psycho-social oncology service in order to manage the psychological/behavioural, social and spiritual aspects of illness and its consequences, but this is lacking in several Italian cancer centers. Furthermore, patients can suffer an additional distress when they move between different areas of diagnosis, treatment, and when they meet shifts of staff each day. An accurate hand-over (or hand-off) of clinical information among care teams might avoid a misunderstanding and an inappropriate treatment, potential harmful to the patients.
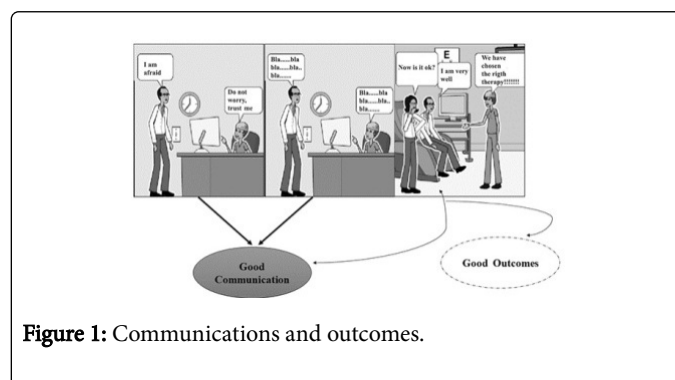

Figure 1: Communications and outcomes.

Limitations

This study reports on the experience of great number of patients that have different type of cancer

Conclusions

In summary, our data showed that oncologists could significantly increase cancer patients' trust through three different oncological consultations since the patients, who had known their oncologist for a year, acquired more trust. After a year, both patient and oncologists were able to better build their relationship: The oncologists listened more to them to understand data on patient adherence and manage treatment side effects, whilst the patients wanted all possible information on their cancer and their therapy. Furthermore, we believe that the same oncologist oversees the same patient throughout diagnosis and treatment to develop a deep and personal relationship.

"Eyes that meet you in silence speaking louder than words......... in a mutual conversation of deep emotions .... the smile of terminally ill cancer patient I will keep forever in my heart. This emotional human component of my job no book will teach me.... this is the most valuable side of my job that I should not forget along my path. However, it is very difficult to live in our land, called The triangle of Death, where many children, adults and elderly persons continue to die of cancer every day. "Doctor Luigi Costanzo".

Authors' Contributions

MGC and GM designed the study, analyzed and interpreted the data, CD made critical advices to the conception and design of the study. LC contributes the data collection and statistical analysis and revised the manuscript. All authors read and approved the final manuscript.

Informed consent and patient details

I confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

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Competing interests

The authors declare that they have no competing interests. The views expressed in this article are those of the authors and do not involve any responsability of ISTAT, university of Campania "Luigi Vanvitelli and University of Rome "Tor Vergata".

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