Prospective Use of Hospice Care in Armenia

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Summary:

Little is written on the management of problems encountered by patients with terminal ill diseases in Armenia. Whereas the conditions is a common as a last state of diseases development, and an increasing numbers of terminal ill patients pose a considerable burden on the family and community.

The purpose of this project is to ascertain whether there is a room for terminal ill patient care in the existing health care services and to develop an appropriate strategy in order to create hospice care unit in Armenia. To estimate an approximate number of terminal ill patient eligible for hospice care.

The paper carry out situational analyze on purposes to reveal in what extend current health care system meet adequately the needs of terminally ill patients and their families. Which of state or private agency responsible for, in order to supplement not duplicate existing services.

The primary concern is the development and set up of a system of services for the terminal ill patients. The international experience in this field. Imperative to do shift among opinion of health care providers and policymakers that the whole family need to be considered as a unite of care. The necessity to set up different approaches toward terminal ill patient care. Who will be responsible for and when is patient actually may considered to be terminal ill.

Hospice techniques for controlling symptoms such as pain are discussed in this proposal. There are showed that there are different type of Hospice care and tendency of development in the world. There is also information about the cost of this project and political and administrative feasibility. There is conclusion and recommendations for implementation of this project. A decision has been made that the Hospice care may and will become one of important services in the existing health care and social system without duplicating existing services.

Introduction:

Hospice originated in England is now appearing in the United State, different path in Europe, and other cultures. Hospice roots extend back to the Middle Ages, but Dr. Cicely Saunders at Cristopher's Hospice in London developed it into its present form (1). In general, there is different type of Hospice care in the world. Even within Britain, there is a diversity of hospice models-in-patient units; hospital support teams, day care and home care, with a broad range of clinical services offered (2). The Discursive Dictionary of Health Care, published by the subcommittee of Health and Environment of the Committee on Interstate and foreign Commerce, the U.S. House of Representatives, provides the following definition of a hospice; " Hospice: a program which provides palliative and supportive care for terminally ill patients and their families, either directly or on a consulting basis with the patient's physician or another community agency such as a Visiting Nurse Association " (3). Thus, the whole family is considered the unit of care, and care extends through the mourning process. Hospice use the team work and careful listening in order to relieve the pain and suffering, to make possible good death, to help the family (1). Hospice as a services and philosophy of care for terminal ill patients, is a venerated system of health care which uses an comprehensive approaches to meet the medical and psychological, spiritual needs of dying person (4). It is also an active process that requires frequent assessment and the aggressive pursuit of appropriate therapies to control both physical and emotional symptoms (5).

In the mean time in the hospice settings full scope health services being provided for " by organized interdisciplinary team available on a twenty-four-hour-hour-a-day, seven-days-a-week basis " (6). Hospices provide an alternative choice for terminal ill patients to spending month or a little more in an institution setting before their death (7). One of the important concepts that the hospice philosophy is famous for is pain and symptom management (8). Hospice is a more person oriented than medical oriented care. In working with the terminal ill patient therapists in more cases, became listener and problem-solver (9). As stated by Masters " hospice is unique in that the patient and family controls the environment, and lifestyle, including treatment modalities, more that in any other concept in health care " (10).

Terminal pain, it is believed, must looked on as separateness and must be treated according to the requirements of each terminal ill person (6). Hospice doctors believe that a some portion of pain will result in from the fear of pain itself. If this concern can be eliminated, pain will be eliminated. (6). Narcotic medications are therefore given freely to dying person in the hospice setting, although in carefully balanced dosage to ensure that the patient remain alert and active. Once the narcotic has broken the pain-fear cycle, dosage is stabilized and even reduced to a non-addictive level. The method by which some hospices have employed to facilitate this process is to encourage patients to manage their own mixture of drug medication. In British hospices, for example the patients are responsible for preparation themselves a drink mixture which include, morphine, liquor, phenothiazine or sedative, cocaine etc. (6). The patient adjusts the dosage according to his tolerance and test. Therefor, although addiction is often the result, hospice philosophy maintains that if a patient is soon to die, why deprive him of the comfort and relief that a well-balanced drug program can provide (6).

In recent years significantly increased the role of home hospice care in the different path in the world. As stated by Cartwright, home care, which help patient to stay at home is becoming more common and accepted. A survey was made of the general practitioners, hospital consultant and community nurses who had cared for terminal ill patients. All three groups wanted more people to be looked after in their homes rather than in hospital if adequate care could be arranged at home (11). But in the same time their perceived inadequacies in home help, specifically in terms of pain management. In Australia the proportion of death which occurred in major public hospitals decreased 12%, conversely the proportion of death which occurred in the hospice setting increased 15% (12). From the establishment the first home care team in United Kingdom in 1969, there were over 400 such team provided home hospice care in 1993 (13).

One of the major problems in serving terminal ill patient was the difficult in predicting their survival time (14). Many hospice care programs offer terminal prognosis time from at least two weeks to six month by which patient may be eligible for hospice care (6). Also many

hospice plans have set up the admittance standards are rather strict. For example, hospice usually restricted to people suffering from a single disease-cancer (6). Thus, the main shortcomings of the hospital services, setting were mentioned inadequate numbers of hospice beds, difficulty obtaining admission for people needing long term care etc. (11)

It is becoming evidence that increasing of chronic disease, aged population led to change the characteristics of hospice patients, by increasing non-cancer diagnoses including AIDS. (15). The authors underline also the special role of social workers as a member of home care team, by assist in orchestrating proactive intervention. (16)

Situational Analysis

As Armenia is economically and politically a transition, many individuals have been left in a state of economic flux. Public expenditures on health care as a percentage of GDP decreased from 4.5 in 1992 to 2.0 in 1997 (17). (See attachment#1 and #2). Thus, public expenditures per capita was estimated $6.75 in 1997 and projected it will be about $17.6 by 2005(17). Having those numbers the Government intends to cover about 40% of all hospitalizations and provide comprehensive range of outpatient services for about $1.5 per capita.

The attendance of population to a health care institutions both to polyclinics and hospitals has decreased dramatically in the recent years, as well as the utilization of health care services in general (17.18) (see attachment#3). For example, hospital bed occupancy ratio decreased from 83% in 1980 to 42.7% in 1996. Visits to the Primary Health Care network (per capita/year) also decreased from 9.0 to 4.6 in 1996. Actually, the health status of nation have a tendency to decreased steadily and deteriorating health status of population became the most critical long term public health issue in Armenia (17)(see attachment#4). For example, crude death rate (per 1000 population) has increase from 5.52 in 1980 to 6.61 in 1995. The situation became worsening with the Maternal Mortality Ratio (per 100000 live birth). The ratio increased from 27 in 1980 to 34.7 in 1996. That is, having those data and also increasing total death from 553.0 (per 100 000 population) in 1980 to 660.99 in 1995, we may state that people stop seeking treatment, moreover, their stay home and dying at home without apply for care. Data on attendance medical institutions have showed that in

more cases low attendance due to financial reasons. According to survey respondents, the main reason for not seeking treatment is the cost of care (17). That is, the situation are more critical for people who need long term care, for instance, chronic, cancer and terminal ill patients in general.

Data on cancer disease prevalence and mortality has also increased for example, death contributed to cancer diseases increased from 74.3 in 1980 to 91.90 in 1995 per 100 000 population (17). (See attachment#5) It is due to: (i) worsening health -endangering personal behavior (18). According to date of National Institute of Health 56.4% of boy and 20.7% of girls from 14-16 years of age smoke (17); (ii) hospital oriented health care system (18), for instance, 89% of public funds were spent on hospital care and only 2% on outpatient care in 1993(17); (iii) either lack or absence of any screening programs toward early detection and preventation of cancer diseases. According to data of Oncology Center the proportion of patients among new registered cancer cases, who were in the first stage of cancer disease development has decreased from 85% in 1987 to 70-75% in 1996 (19). Thus, about 30% of new registered patients were in the last stage of disease development. This means that these patients are terminally ill at the moment of applying for help to the medical institutions. That is cancer diseases are now the second leading causes of death in Armenia (see attachment #5).

Roughly estimation of terminally ill patient eligible for hospice care:

As have been stated above many hospice care programs offer terminal prognosis time from at least two weeks to six month by which patient may be eligible for hospice care (6). Unfortunately data on prevalence of terminal ill patients are absent. But we can estimate these numbers indirectly by analyzing mortality data in Armenia in 1996 (19) (see attachment #5).

a) As a starting point we may eliminate almost all unexpected and acute cases of death as a not eligible cases for hospice care, for example death due to trauma, accident, poisons, heart attacks and cerebro-vasculsar-disorder. The total number of unexpected case attributed to these diseases roughly estimated 7571 death per year. (Someone may argue

that some of the death due to heart attacks, trauma or cerebra-vascular-disorders may became eligible for hospice care because in this cases we do not taking into consideration survival time from the cases occurred to death. The fact that terminal prognosis time very variable in all above-mentioned cases is a true, and we use this methods only as a roughly method in order to facilitate calculation).

b) Cancer and death synonym for many in mind. Actually, the basic portion of terminal ill patient eligible for hospice care are cancer patient on the last stage of disease development, so we may assume that almost all 3663 died persons in 1996, (19) (see attachment #5) due to cancer disease may consider as a potential patient eligible for hospice care. Even regardless their personal perception in regard of hospice care.

c) Some portion of died persons due to diabetes mellitus, lungs diseases and other chronic diseases we may also consider as a eligible for hospice care, because these diseases a relatively common medical condition in hospice settings. The total numbers of death contributed to this group of diseases is estimated about 2700 death in 1996 (see attachment#5). Though this statement also subjective, because we do not taking into consideration patients or their families members perception toward either home hospice or hospice setting care. However, in order to get precise estimation we need to carry out need assessment study.

Therefore we may assume that at least 3663 died patients (most cancer patients) per year may became eligible for hospice care in Armenia. A maximum number, we may estimate by subtracting all 7571 unexpected and acute cases of death out of 24903 total death, (see attachment #5) so in this cases about 17 000 died patient may consider as a eligible for hospice care per year in Armenia.

In what extents an existing health care system meets adequately the needs of terminal ill patients:

In order to not duplicate the existing health care services we need to analyze and describe current situation in health care. Analyze, in what extent current legislation, administrative

framework of health care system and medical institutions, as well as health care reform strategy met adequately the needs of terminally ill patients.

According to the health reforms strategy the Ministry of Health Republic of Armenia has declared that health care system in Armenia will became more oriented toward Primary Health Care (PHC) network and the main efforts has to be done on disease prevention rather than treatment (17). The framework of the health care delivery system is based on territorially structured hierarchical network. Within of hierarchy in each stage are medical institutions and each of them has its own destination and targeted goals; (i) primary health care network; total numbers are estimated about 1500 in 1997(18); (ii) network of hospitals capable of to delivery comprehensive health care delivery services, as well as obstetric and gynecologic services too; (iii) network of high specialized hospitals (Research Centers, Institution, Medical College's hospitals) capable of delivery specialized medical services. The total number of all hospitals in both levels estimated 169 in 1996 (17).

As was mentioned above the first step is PHC network. These PHC facilities are located countrywide. In the rural place their are called also as a " health centers or post" and in the urban places "polyclinics". The health centers in rural area staffed by one doctor and has at least one nurse. The health posts are responsible for delivery ambulatory health care services, carry out vaccination programs, conducted health education programs among the served population, to delivery health care services to the chronicle ill patient and follow up treatment. In cases if the patient condition become unstable or acute the "Health post" might to direct patient to the nearest hospital for the father treatment. The served population for PHC network facilities have been established about from to 500 to 80 000 population. All PHC network is staffed equipped based on served population numbers and their capacity are very different in different marzes. All PHC network are funded per capita from public budget (the percentage of PHC and Hospital funds within public budget were estimates 2% and 89% in tern in 1993)(17). According to data only 24% of rural health centers are staffed with a physician (17). The Centers' capacity to deal with primary and secondary prevention

of chronic non-communicable diseases is limited and weak due to inadequate equipment, shortage of trained staff, and poor management (17,18).

Thus, according to reform strategy these medical institutions will be more oriented to prevent diseases, keep patients healthy and to treat chronic ill patients. There is nothing written about terminal ill patient care. Moreover the current practice does not define and established characteristics, differences between chronic ill and terminally ill patient care. Another targeted goal of these type medical institutions is a gatekeeper function. This means that those general practitioners/family doctors responsible for making decision how and where patients may referenced to continue treatment and farther diagnostic procedures in need.

The second level hospitals network also is located countrywide in each district. The approximate number of served population are estimated from 50 000 to 200 000. According to the health care reforms policy the government has established the list of diseases and health services that will be reimbursed or compensated from the public budget (Basic Benefits Budget) (20). Thus, for certain type of diseases have been established the certain number of hospital days, and the administration and doctors must act in compliance with this instruction, otherwise their might to fill out a special form explaining why that patient is still there or exceed the established hospital days. If a good reason is not forthcoming the government may do not compensate the expenses. That is in such casing the hospital administration will be asked patients to leave hospital or will send them to home. However, one important thing about the hospitals to bear in mind is that the hospitals are obliged to keep a patient only as long as the patients is in a acute condition of sickness or distress. The moment that the patients' condition is stabilized, he or she will be sent home. Such in the case even if the person is suffering from terminal diseases. Therefore, one must not assume that because a persons chronically ill he or she is automatically a candidate for hospitalization. Current bed utilization practice defines a hospital as an acute care facility, not a chronic facility.

Third stage in the hierarchy was determined as an acute care and inpatient oriented medical institutions. They're mostly, scientific- research facilities and capable of delivery specialize medical services and treatment, in the mean time by conducted research study and investigations. For example scientific research institute of Surgery, Cardiology, Proctology, Oncology etc. In any case this institution also delivery acute care and had not designed to delivery long- run treatment for chronic ill patient, nevertheless terminal ill patient care.

Next organizational level are network of medical institution designed to delivery rehabilitation care for post acute care patients or delivery social rehabilitation for handicap persons for example Post-Trauma Rehabilitation Center (PTRC) etc. Some of those institutions were acted also under the scope of the Ministry of Social Security also, for example PTRC etc

Conclusion:

However, in spite of having huge amount and divers oriented medical institutions no one are oriented toward hospice and palliative care. Thus, no one of existing medical institutions met adequately the needs of terminal ill patients in terms of pain management. The health care system at hole, incapable of delivery long time medical care. The administrative structure has not oriented to serve the needs of terminal ill patients and their family members.

The health care system capacity is very limited in terms of care terminal ill patients.

It is common practice for health care system to avoid having deal with this type of patients and left patients and their family members alone without any social or public support.

The terminal ill patients were considered as a chronic ill patient and medical institutions dealing with theses patients according to they own understanding and interpretation. For example, among health care providers there is a different practice in terms of dying persons' pain management performance. The terminal care is still medical oriented, not person oriented and does not meet the needs of dying person family's members. For the families having one terminal ill patient would be result in serious financial, spiritual or psychological consequences. In particular children with terminal illness make a deep impression either on

family members or on everybody around them. They need help in communication, respect and a lot of affection. The family requires support in the different phases of adaptation to the illness and in the bereavement period. That is in such casing a dignity of terminal ill persons and family members had been destroyed dramatically. There is no any, public or charitable institutions or organizations capable of helping families in terms of how to handle terminal ill persons and overcome their problems. There is no one who can explain, ask and request that human dignity should be emphasized everywhere and especially during the most critical period of human existence during the terminal period of life.

Recommendations:

That is, increasing numbers of cancer and terminally ill patients, high cost of health care services, incapability of health care delivery system delivery long term care, bring creation of the Hospice services in Armenian on a prominent position.

The Ministry of Health and other relevant public institutions has to set up different and comprehensive policy toward of care terminally ill patients. Moreover family physicians, health care providers have to be trained to address core problems encountered in the care of dying patient.

Program Aim:

To afford dignity and quality of life for dying patient and their families through death and the period of familial bereavement.

Program Goals:

1. To improve quality and efficiency of terminal ill patients care through implementation of Hospice care plan from 1998 to 2000 in Armenia.
2. To cost-efficiently provide, counseling and emotional support to family members of terminal ill patients in Armenia.

Strategy Appraisal:

In order to fulfill program goals the several feasible strategies are considered. As mentioned, a hospice is a place that practice a principle either a ward or department on an existing hospital or a isolated units of its own, where a terminal ill patients goes quite

specifically to die. There is also Home Hospice care plan, which help patient to stay at home.

The hospice plan either department on an existing hospital or isolate unit, contrary to many hospitals, is to encourage family members to become part of the daily routine on the ward, to get to know the care providers, to attend symposiums and group discussion. To spend as much time with the patient as is practically feasible; to be part of helping team; friends, children, all are welcome in the hospice setting. The patients are allowed to bring precious possession into the hospital and to decorate their own rooms and have supplying with a full scale choice of personal services, including a dentist, an occupational therapist and so on.

The central notion of the home hospice care plan is keeping the patients and family together throughout the terminal period. All services delivered by hospice home care team and staff are available twenty-four hours a day. The staff is available both to people who have gone home for the weekend and to patients who wish to stay at home throughout the terminal period. Visits are made to the patient's house at scheduled times, and staff is on alert at all hours should emergency arise. The home care team is consisted by doctors, nurses, aids-volunteers, social workers, pastors and so on. The hospice staffs are work closely with other home care personal, for example family doctors and visiting nurses. Actually, home care plan provides services based on Hospice care unit. For example, if there are, 50 patients living in a hospice, another 100 or 150 patients may be served by this hospice (6).

In order to carry out strategy appraisal analysis, advantages, disadvantage and also administrative and political feasibility of each hospice plan is considered. As we mentioned above advantages of hospice home care plan is keeping the patients and family together throughout terminal period. These enable patients avoided psychological problems generally encountered when patients are admitted to the hospice setting. Next important advantages of this plan is keeping cost down compare another hospice care plans.

One is high likely way of implementation of hospice home care plan is a PHC network in Armenia (taking into account countrywide distribution, accessibility, infrastructure, staff etc). But in terms of administrative feasibility there are several restrictions:

1. According to the World Bank Staff Appraisal Report on June 1997, the PHC network is weak due to lack of infrastructure, inadequate equipment and shortage of trained staff. The PHC providers have low professional status and only 24% of rural ambulatory are staffed with a physician.
2. The PHC facilities is able provide health home care services, but at present, the staff is not trained to provide hospice care services.
3. There is no possibility to organize and maintain hospice home care services at twenty-four hour a day, because PHC do not suited to operate at hole hours a day. Moreover their incapable of provide emergency hospice home services (shortage of resources, organizational framework, equipment etc).

4. The PHC network compare with the hospice setting, incapable of provide qualify and effective pain management in general (11).

In fact, whereas more people look after homes setting rather than in hospice setting in the world, the adequate care is difficult to arrange at home (11). Nevertheless this true for Armenia because PHC network is weak. However, taking into consideration the above-mentioned facts, it makes better sense to organize home hospice care plan based on hospice setting.

One of advantages of hospice care either department or ward on an existing hospital, is a also relatively high possibility to keep cost down compare with the hospice unite. It will enable to increase given hospital beds and health services utilization also. In a multidisciplinary hospital setting more ease to provide different services to the terminal ill patients. This will save financial and human resources also. But there are several restrictions in this regard:

1. Regardless of existence huge numbers of hospital beds 9.9 per 1,000 population (compare with respective indicators 8 per 1,000 population in established market economy) the bed occupancy rate only 44% (17). This means, that the people do not apply for care to existing hospital setting. That is, allocation of the hospice setting on an

existing hospital will result in less utilization of hospice care services because of barriers to access.

2. Existing hospital setting and out-pocket illegal payment tradition, unsatisfied staff will decrease expected outcome and will negatively influence on patients and family members psychology.
3. On a hospital-based allocation, terminal ill patients may arise additional question such as "Will I die?" instead of " How I will die" because of personal perception that in any case this is a hospital and the doctors have to treat patients.
4. In some point of view this a political issue also. If there is a willingness and capacity of creation Hospice care unite, it will be better to do it.

The advantages of hospice care units will be possibility to institute new approaches and policy toward terminal ill patients. Moreover this institution through training classes may and will became hospice center for health care providers and volunteers intending to became members of hospice staff or rehabilitation team. However, hospice care unit will facilitate implementation of hospice home care services in Armenia.

Program Implementation:

The purpose of the program to implement person oriented hospice plan (not only medical oriented) capable of delivery comprehensive social, psychological services ensure spiritual rehabilitation of dying persons' family members. All of these above-mentioned goals are high likely will be done by implementing plan with the Ministry of Social Security.

Actually, there is a verbal agreement with the Minister of Social Security Mrs. Hranush Hakopian that this program will be submitted to the Ministry of Social Security (MOSS), and the MOSS will take main responsibility for coordination and program implementation. This program will be submitted to the Government Republic of Armenia (ROA), United Nations High Commission for Refuges (UNHCR) charitable foundations, and international Private Voluntaries Organizations (PVO) and others organizations located in and out of Armenia on behalf of the Ministry of Social Security. Also program concept paper have already asked by the First Lady of the ROA Mrs. Ludmila Ter-Petrossian and have been

submitted to the First Lady the USA Mrs. Hillary Clinton for possible financial and technical support. The newspaper " Republic of Armenia " on October 29 or 30 in 1997 had announced that the First Lady has got preliminary agreement with Mrs. Hillary Clinton in this regard.

However all activities have to be done with the close relationship with the Ministry of Health ROA. Specifically, all medical aspects, manuals such as admission guideline, Hospice operational manual, home care delivery manual development, pain and others symptom management, and any others procedure in need. Moreover, there is a need to set up policy how to implement and administer home hospice care services into existing cares services.

The MOSS and MOH need to take responsibility for developing and submitting to the Government of ROF a legislation which will meet the needs of terminal ill patients and their families.

Management framework:

In order to ensure economic and social sustainability of given project the following are recommended:

1. Hospice care units need to be under the scope of the MOSS as a other public institutions oriented to delivery social services;
2. Non-profit oriented public institution; will be manage by board of trusties.
1. The long time policy development and management as well as staffed issue in general have to be administered by board of trusties.
2. The board of trusties will assign the executive director (MBA, MPH, or 5 years experience in social management is required) and medical director (Medical degree is required) for daily management and will approve their job description.
3. The executive director and medical director will report to the board of trusties' quarterly.
4. The board of trusties may delegate additional responsibility to the executive director in need.

5. At the initiation all hospice care services will be provided free of charge; (six month, but may be exception if patients relatives is agree to reimburse some expenses)
6. After six month operation some portion of home care services will be delivered based upon cost-recovery mechanism (portion and amount will be estimated by board of trusties.)

Program Evaluation:

In order to evaluate program we may examine several outcomes of hospice care that correspond to the stated goals of the hospice. In this cases estimation the cost of hospice and standard care will be preferable. Also will be preferable estimation the satisfaction of terminal ill patients' family members in and out of hospice setting.

1. **Program Objectives:**

Objective # 1:

To improve quality of terminal ill patient care and their family's members satisfaction in Yerevan in 1999.

Activities:

1. To negotiate with the Ministry of Health, Ministry of Social Security and Governor of Yerevan City in this regard and pick up a relatively adequate building for the 50 inpatient in Yerevan. To organize decision making committee by including specialists from different area in order to design and develop renovation plan and timeline. All these activities will be done from January to March in 1998. Next, competitive bidding announcement and get renovation started. Construction will be completed up on December 20 in 1998.
2. To negotiate with the Health Research Center of the American University of Armenia to provide and carry out all survey and analyzes in need (for example KAP survey of population in Yerevan. Terminal ill patient's family members satisfaction etc.). Also to fulfil program evaluation.

Objective #2:

Organize Hospice nurse and social worker trainers training classes two weeks, 8 hour/per day (estimated number 7 nurses and 20 volunteers) from January to Feb in 1998.

Activities:

1. To organize training classes in the renovated hospice care unit.

2. To purchase adequate office equipment (overheads, projectors, Television and Video set, etc.).

3. To negotiate and apply for technical assistance with the one existing Hospice Care Units in the USA or UK. (Invite a hospice nurse and 2 volunteers from hospice team members to share experience in this regard).

Objective #3:

To serve 300 inpatients at the hospice care unit in 1999. To set up a home care program serving about 60 patients in 1999.

Activities:

1. To set up hospice admission guideline and survival time for dying patients eligible for Hospices care from January to February in 1998.

2. To organize three-hospice rehabilitation team capable of delivery home cares services on April in 1998.

Objective #4:

To increase knowledge, attitude among health cares providers and community (mostly students) about terminal ill patients by 40% in 1999.

Activities:

1. To organize advocacy campaign in order to increase public awareness toward hospice care from December in 1998 to 1999.

2. To make a 20-30 min. film about terminal ill patients, and their problems. The film from November to December in 1998 will be showed by TV and will accompanying with public donation.

3. Organization and delivery series of lectures for health care providers, policy makers, and community members. Specifically, we need to address our attention towards student's settings. The possible topics of lectures (total number 6) in 1999:

a) " The role of students and youth in the volunteers movement ".

b) " Hospice care and volunteers movement."

c) For health care providers " Terminal ill care and Pain management ".

d) For policy makers " Prospective Use of Hospice care in Armenia ".

e) " Home hospice care: the role of visiting nurses and social workers "

f) " Hospice care and terminal ill patients of families members."

4. Interview with the family's members of terminal ill patients, about their needs in 1999.

5. Publications in this regard on the newspapers .To release KAP survey data and to initiate public debate on this topic.

Program Budgeting:

Project Expenses

1. Building renovation	$500 000
2. Diagnostic & Laboratory equipment	$100 000
3. Medical supplies & Medicines	$50 000
4. Training(including three trainers)	$10 000
5. Furniture & office equip(including 4 PC)	$10 000
6. KAP survey and needs assessment	$15 000
7. Personnel Costs:	
Executive Director (1)(12x$500+30%)	$8000
Medical Director (1) (12x$500+30%)	$8000
Nurse Director (1) (12x$500+30%)	$8000
Finance /Compliance Director (1)(12x$300+30%)	$4680
Medical Doctors (10)(12x$300x10+30%)	$46 800
Administrative Manager (1)(12x$300+30%)	$4680
Nurses (30) (12x200x30+30%)	$96 000

Sanitary	(4) (12x150x4+30%)	$3744
Drivers	(4) (12x150x4+30%)	$3744

Operations Cost:

Services Delivery	$10 000
Vehicles (3)	$30 000
Transportation	$2000
Office supplies	$2000
Advocacy campaign	$5000
Evaluation	$3000

Total Budget; $920 648

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Comparative Health Data: Main Health Indicators in Armenia and Selected OECD

Attachment#2

Table#1:

Indicator/ Country	Armenia	Belgium	Canada	Mexico	Turkey	UK
HCE as% of GDP	1.9	8.2	9.8	4.9	2.6	6.9
Doctors per 1000	3.4	3.7	2.2	1.0	1.1	1.5
Hospital beds per 1000	7.6	7.6	6.0	0.8	2.5	5.1
ALOS	15.2	12.0	12.6	3.9	6.7	10.2
Total Fertility Rate	1.63	1.55	1.7	2.9	2.69	1.75
Infant Mortality Rate	1.4	0.76	0.68	1.7	4.68	0.62
Life Exp. at Birth M/F	68.9/75.9	73.0/79.8	74.9/81.2	69.4/75.8	65.4/70.0	74.2/79.5

Note: Data: Armenia--1995, OECD--1994

Armenia Health Sector Indicators: Health Status

Attachment#4:

Table#2:

Average Life Exp.	1980	1985	1990	1991	1992	1993	1994	1995	1996
Overall	72.8	73	70.7	72.4	71.2	71.2	71.6	72.5	72.9
Male	69.5	69.8	67.4	68.9	68.7	67.9	68.1	68.9	n/a
Female	75.7	75.7	73.3	75.6	75.5	74.4	74.9	75.9	n/a
Aver.Life Exp. at 30									
Overall	46.5	46.6	43.4	44.9	44.7	43.8	44.2	44.9	n/a
Male	43.3	43.5	41	n/a	41.6	41.0	41.3	41.8	n/a
Female	49.2	49.1	45.7	n/a	47.6	46.4	47.0	47.8	n/a
Mortality									
Crude death rate per 1000 lives births	5.52	5.82	6.21	6.51	7.03	7.36	6.58	6.61	n/a
Maternal Mortality ratio	27.0	22.1	40.1	23.1	14.2	27.1	29.3	34.7	n/a

pr100000 live births									

Leading Causes of Death from 1994 to 1996 in Armenia

Attachment 5

Causes/years	**1994**	**1995**	**1996**
Heart disease	8140	8698	8543
Cancer	3108	3384	3663
CerebroVascular	3505	3515	3553
Hypertension	2227	2748	2772
Heart attak	2038	2342	2465
Lungs diseases	1606	1600	1703
Diabetus melitus	718	917	1058
Total Death	**24 652**	**24 842**	**24 935**