



Factor Responsible For Delayed Cancer Diagnosis

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Abstract

To assess the factors responsible for delay in cancer diagnosis and its impact on prognosis and to increase and spread awareness in public to facilitate early diagnosis and treatment by a prospective study conducted in NSCB MCH JABALPUR over a period of one year {Oct 2013 to Oct 2014}.

Cancer is one of the most leading causes of death in many countries despite the advancement in cancer treatment and diagnosis. One of the main reasons for this is delay in diagnosis or initiation of treatment at advanced stage. Delay in diagnosis and treatment of cancer patients may impact on poor prognosis and quality of life.

Meaning of Delay

- Delayed diagnosis in cancer is when someone who has cancer¹²:
- Is not investigated or referred for investigation.
- Having been investigated is not diagnosed at the time of the investigation.
- Is diagnosed incorrectly.
- Where a positive test result or diagnosis is not communicated effectively to a clinician with the ability to act on the information.
- Where a positive test result or diagnosis is not acted upon and treatment commenced as appropriate.

Why is spotting cancer early important?

When we talk about 'spotting cancer early' we mean diagnosing cancer at an early stage, before it's had the chance to get too big or spread to other parts of the body. Diagnosing cancer at an early

stage means it can often be easily removed or treated. If the cancer has spread, treatment becomes more difficult, and in almost all cases a person's chances of surviving that cancer are much lower. So finding and treating cancer at an early stage can make a real difference.

What are the reasons for late diagnosis?

There can be a number of reasons for delays in cancer diagnosis, for example:

- Low awareness of cancer signs and symptoms among the general population can mean that people don't see the doctor as soon as they might which could delay a diagnosis.¹⁸
- Poverty & lack of family support.
- Some people might delay because they're worried about what the doctor might find or they don't want to disclose their problems.
- Miss-guidance by relatives, society & physician.

- Wrong interpretation & diagnosis by physician.
- There can be delays in doctor’s referring patients on for tests or treatment.
- Delays can occur in getting an appointment at the hospital.
- Delay can occur in reaching correct diagnosis & starting treatment.

Cancer misdiagnosis or delay in diagnosis can lead to:

1. The need for *more aggressive treatments* because of the advance of a disease that could have been caught earlier.
2. Implementation of the wrong treatment due to misidentification of the type of cancer, potentially leading to additional medical concerns, *side effects or even spreading* of the disease
3. *Premature death* caused by delays in treatment.
4. Increase cost of treatment.
5. Increase burden on family, society & health facility.
6. Change in psychology regarding cancer.

Prospective study was done using questionnaires on 209 diagnosed cancer patients to assess the factors responsible for delay in diagnosis and treatment of cancer in Department of General Surgery, N.S.C.B. Medical College & associated hospitals Jabalpur from Oct. 2013 to Oct. 2014. Mean age of patient was 49.1 (15-82) years & gender ratio (F:M) was 1.1.

Significance of Different Reasons of Delay

Reason of delay	Total delay in months					Total
	< 1	1--2	3—5	6—10	> 10	
CONSIDERING IT A MINOR PROBLEM	0	28	28	34	29	119
DISEASE WAS PAINLESS	0	5	9	10	11	35
FAITH ON HOME REMEDY	0	0	0	1	0	1
INVOLVEMENT OF GENITAL ORGAN	0	0	0	0	1	1
LACK OF AWARENESS & INFORMATION	0	0	0	2	3	5
MISGUIDANCE	0	1	0	0	0	1
MISGUIDED BY MALPRACTIONAR	0	0	0	1	0	1
MISGUIDED BY QUACK.	0	0	1	0	0	1
NO FAMILY SUPPORT.	0	0	0	0	1	1
RELYING ON HOME REMEDY	0	0	1	0	0	1
SELF MEDICATION	0	1	0	0	0	1
No Reason/No delay	14	15	4	4	5	42
Total	14	50	43	52	50	209

Three most common cancer type in our study were breast 48 (23%), cervix 31 (14.8%) & buccal mucosa 26 (12.4%) comprising more than 50% patient included in study. Among 110 women breast & cervix were leading cancer which comprises 79 (72%) cases among them. Among men oral cavity carcinoma (35.6%) was common. Out of 209 patients more than 50% patients were diagnosed in stage 3 & stage 4.

190 (90.9%) patients had avg. delay of 3 months from first recognition of signs and symptoms to first medical consultation. 56 (26.8%) patients had avg. delay of 5 months at physician level (qualified medical practitioner). 3 patients were not advised properly whereas appointment delay were seen in 11 (5.3%) patients at MCH JABALPUR. Out of 209 patients 96 (46%) patients did not underwent proper diagnostic work up even after proper advice. Avg. total delay from first recognition of symptoms up-to starting of proper management was 8.4 months. Out of total 209 patients 15 patients did not have any kind of delay. We also focused our study on these three possible levels of delay; 1) at patient level 2) at the level of first medical consultation 3) at our institution.

1. At Patient Level

Out of total 209 patients included in our study 190 patients have a delay (median 3 months) in consulting a qualified medical practitioner while 19 patients consulted as soon as they recognizes the clinical features of their disease.

2. Delay after First Medical Consultation

In our study out of 209 patients 190 have a delayed medical consultation. Out of these 40.7 % advised diagnostic work up keeping cancer as probable diagnosis and another 32.5 % patients were referred to higher centre for further evaluation. 26.8 % patients (more than 1/4) were given symptomatic m/m for a variable duration. These patients have a delay in cancer diagnosis ranging from days to months (avg. 5 months). Those patients who have more than 5 months delay at physician level have more significant total delay.

3. Delay at our institution (system level)

After early medical consultation and proper advice and referral by health practitioner the

possibility of delay is not ruled out. There may be delay in seeking appointment for further consultation and investigation, improper guidance, inconclusive investigation reports and delay due to inappropriate technique and reporting of histological test. In our study 5.3% patients have appointment delay @ our institution. 20.1% patients have inconclusive FNAC/BIOPSY reporting. Mean duration of FNAC & BIOPSY reporting was 4 days & 12 days respectively. In our study inconclusive report leads to slight increase in total delay but that was not statistically significant.

Summary of Delay

		PATIENT LEVEL DELAY	PHYSICIAN	TOTAL DELAY
Number of cases	Yes	190	60	195
	No	19	149	14
Mean		6.48	4.92	8.46
Median		3.00	2.50	5.00
Std. Deviation		10.777	6.958	11.561
Range		96	36	102
Minimum		0	0.5	0
Maximum		96	36	102
Percentiles	1.00	2.00	2.00	2.00
	3.00	5.00	2.50	5.00
	7.50	11.00	6.00	10.00

Factors significantly associated with delay were:

- Illiteracy & lack of awareness
- Occupation (labor)
- Late consultation with family members
- Consultation with unregistered medical practitioners
- Not giving importance to illness
- Lack of awareness among physician at first consultation level

- Fear of society and misguidance by society
- Inconclusive tissue diagnosis test or delay in reporting.

Our study included 209 proven cancer patients regardless of site and stage. There might be possible selection bias in the study. Measures are required to increase the cancer awareness among population and physicians.

Factors not significantly associated with delay were:

- Painless nature of the disease
- Family problem & poor family support
- Involvement of genital organs
- Faith on home remedy

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