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Colorectal Cancer Resource Gaps in Social Support Finance and Healthcare Access

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Abstract. Colorectal cancer imposes multifaceted burdens that extend well beyond the physical effects of disease and treatment. This review synthesizes recent peer-reviewed literature to characterize interconnected resource gaps among colorectal cancer patients across three domains, social support, financial hardship, and healthcare utilization. The evidence demonstrates that resource availability rarely guarantees effective patient access, as practical barriers including low insurance literacy, geographic distance, communication difficulties, and disability-related needs undermine the usability of formally available services. Financial toxicity manifests not merely through medical bills but through employment disruption, material hardship, and limited understanding of insurance coverage, while the quality of social relationships outweighs sheer support availability for psychological adjustment. Healthcare disparities persist even within universal-coverage systems, disproportionately affecting socioeconomically vulnerable, working-age, and disabled patient populations. The findings indicate that isolated interventions cannot resolve overlapping unmet needs, and coordinated multi-domain assessment, patient navigation, and targeted referrals represent a promising public-health strategy to mitigate these intertwined resource inequities.

Keywords: Colorectal cancer, social support, financial burden, healthcare access

1. Introduction

For CRC patients, treatment is more than following advice. They need to travel to hospitals far away from homes, pay expenses for families. These may after occur after the treatment. Research on CRC survivors found that overall health status is closely related to employment status, prompting us to pay attention to patients' lives outside the clinic [1]. This paper focuses on three resources: social support, economic status, and accessibility of medical care. For example, like having a family member be with a patient to the doctor solves transportation issues. Also, like arranging transportation may cause extra money. The study covers multiple aspects, like including treatment utilization, economic hardship, and patient welfare [2-9].

For patients have the insurance, economic hardship can also be a problem. Treatment cancels only just the working hours, bills are still there. Sadigh et al. found that early-stage CRC patients usually have some economic difficulties [4]. Edward et al. studied another aspect of this issue, like

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whether patients have confidence in choosing and using insurance [5]. In general, these studies showed that when assessing a patient's economic needs, their disposable funds could be a problem.

Medical services access depends on the patient's status in medical institutions. A study of insurance benefits with peritoneal metastasis found that distance to specialized hospitals is related with less access to some of medical services [6]. A review in the UK pointed out that inequality in treatment of CRC in national health system [7]. Interviews with Austrian caregivers also revealed patients with intellectual and developmental disabilities face some sort of communication barriers during treatment [9]. These show their results cannot be generalized. This paper explores the topic of "Which resources are lacking that affect rectal cancer patients" and "How can these problems be addressed through support measures". "Resource gap" means lack of actual services. It shows the overlap between issues and measures can be taken during treatment.

2. Gaps in social support

Patients receive support from outside members in society. They could listen to concerns. However, the forms of this support are diverse, and patients may not be able to discuss cancer in their daily lives. Le et al. studied the social support of patients at a tertiary hospital in Vietnam and the use of colorectal cancer treatment [2]. Surgery was the most common treatment method, followed by chemotherapy and radiotherapy. The researchers found that the longer the diagnosis period, the lower the level of social support. Higher overall support levels, as well as the combination of emotional and practical support, were associated with increased hospitalizations and higher rates of chemotherapy use. This indicates that support is related to the actual condition of receiving treatment. However, this study is an observational study and cannot prove that increasing support will directly lead to more treatment, nor can it indicate that higher rates of treatment use are always appropriate.

The type of relationship between patients and their close companions is also crucial. In a survey of 124 newly diagnosed colorectal cancer patients, Ajmera et al. studied the support provided by spouses or partners during treatment and social restrictions [3]. Social restrictions refer to situations where patients feel restricted or lack encouragement when discussing issues related to cancer. Higher levels of social restrictions are associated with lower life satisfaction for both male and female patients and more severe depressive symptoms in men. In the main adjustment analysis, subjective perceived social support was not independently significantly related to these results. This finding makes it difficult to determine the degree of support solely by asking if the companion is present. There may be companions at the patient's home to provide assistance, but discussing the disease may still be difficult.

The caregivers themselves may also encounter difficulties. Zeilinger et al. conducted interviews with 13 caregivers of individuals with intellectual disabilities in Austria regarding CRC screening [9]. Some caregivers had limited knowledge of symptoms and risk factors, and this also reflected challenges such as stigmatization, communication difficulties, and problems in the medical environment. Making accessible information available and conducting staff training are among the possible ways to improve the situation. Since the research focused on screening, not all participants should be regarded as CRC patients. Smaller sample size limits the understanding of a larger population. These considered different care stages. The Vietnamese study focused on treatment's applying; the partner's study focused on psychological adaptation; and the Austrian study focused on screening. However, we should not consider these as strong support. Better method is to ask patients what kind of support they actually want. This creates space for the emotional needs.

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3. Interconnected resource gaps

3.1. Financial and economic resource gaps

Cancer treatment may affect a family's income and expenditure. Patients may encounter difficulties such as medical expenses, transportation costs, reduced working hours or difficulty in maintaining employment. Financial issues may also change over time, so a single assessment at the time of diagnosis is not comprehensive enough. Sadigh et al. conducted a follow-up study on 451 patients with stage I to III colorectal cancer who underwent radical treatment [4]. Among the 217 patients who had both baseline data and 24-month data, the proportion of those unable to continue treatment due to economic difficulties decreased from 57.6% to 35.0%, which was statistically significant. The proportion of patients who did not follow the treatment plan due to economic reasons at baseline was 8.8%, and at 24 months it was 9.2%, with no significant change. This indicator focuses on patients who failed to continue treatment according to the recommended plan due to economic reasons, which is different from "economic difficulties". Even if patients face severe financial difficulties, they may still continue treatment. Therefore, merely continuing treatment does not prove that their economic situation is good. Chemotherapy is also associated with higher economic difficulties.

The subsequent results indicate that it is necessary to repeatedly inquire about the patient's economic situation. Changes in employment, treatment, insurance or family status may generate new demands that did not exist initially. Sadigh et al. suggest conducting early screening and continuous assessment, and referring for economic assistance when necessary [4]. Their research results do not mean that the economic situation of every patient will improve after two years. The paired results describe the status of 217 people who completed two assessments.

Edward et al. conducted a survey of 104 colorectal cancer (CRC) survivors [5]. Approximately 80% of the respondents reported at least one economic burden related to the cancer, and 84% had low digital literacy, meaning they had difficulties in handling numerical information. The average financial toxicity score was 24.5 points. Higher financial toxicity was associated with greater economic burden, lower digital literacy, and lower awareness of health insurance (i.e., lacking confidence and behavior in choosing and using insurance plans). Insurance clause knowledge was measured separately but was not significantly correlated with financial toxicity. This is important because understanding insurance clauses is a different task from actually applying insurance plans. Even if patients are familiar with basic insurance clauses, they may still need help to understand the specific meaning of the bill.

Employment status affects financial status. The ColoCare study surveyed 202 CRC survivors. It compared groups differ on age [10]. At time of diagnosis, 83% of the 18-49 age group were employed, 64% of the 50-64 age group were employed, only 14% of 65+ age group were employed. So young people showed more difficulties for work burden. For everyone reported difficulties, the 18-64 age group faced worse situation than the 65+ age group. These are related to work, do not mean that young patients are poorer just in general. In interviews, Yao et al. showed financial affect daily life [11]. 15 patients undergoing chemotherapy at hospital in China remember economic burdens. These allows patients to remember experiences were difficult to measure. However, this could not determine the problems occurring in all CRC patients. It is best to combine the data to analyze the difficulties in a larger sample.

Therefore, several aspects need to be evaluated: whether patients can afford treatment costs, whether work is affected, and whether they understand the relevant costs and insurance

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arrangements. Financial counseling may help address the last issue, while income reduction may require direct assistance. The specific response measures depend on the root cause of the difficulty.

3.2. Healthcare access and system-level resource gaps

Access to nearby medical services is part of the treatment process. In appropriate cases, patients may also need referral, access to relevant services, and obtaining necessary information. Some matters related to treatment involve specialized care, while others occur earlier, such as during screening or diagnosis. Aquina et al. studied 7,653 American Medicare beneficiaries with appendiceal cancer or colorectal cancer and detectable peritoneal metastases [6]. Only 250 cases (3.3%) received extensive cytoreductive surgery (CRS/HIPEC) combined with preoperative intraperitoneal chemotherapy. Among the 7,403 patients who did not receive this surgery, 475 cases (6.4%) received outpatient consultations from surgeons specializing in malignant tumors of the peritoneal surface. Older age, more comorbidities, higher social vulnerability, and greater distance from the specialized center were all associated with reduced access to treatment or consultation. This is particularly important because having access to specialized consultation is one of the important factors in evaluating treatment options. The low treatment rate does not mean that all patients who did not receive CRS/HIPEC treatment should receive it.

The three-year overall survival rate of patients receiving CRS/HIPEC treatment was higher than that of patients receiving only systemic treatment [6]. However, this is an observational comparison. The differences between different patient groups may help explain the survival results, and thus it is impossible to determine the effect of the treatment itself or the impact of unequal access. This study also focused on a specific population with peritoneal metastases, rather than all patients with colorectal cancer.

In the UK, Smith et al. reviewed the inequalities in the treatment of colorectal cancer (CRC) under the universal healthcare system [7]. Their review included 41 studies from 7,209 records. Among them, 12 studies examined the time interval from the first visit to diagnosis, and the results showed that people with lower socioeconomic status had a longer time from the first visit to diagnosis in primary care. Among the 32 studies involving treatment, the review found differences in surgery and chemotherapy, but inconsistent evidence in radiotherapy. Financial counseling and transportation support were discussed as possible solutions. The review pointed out that extensive medical coverage could coexist with individual differences in treatment methods, but did not prove that the same barriers could explain all treatment differences.

Riviere et al. compared the impact of racial differences on the survival rates of colorectal cancer in two regions of the United States [8]. They analyzed 263,893 patients from the SEER registration system and 24,375 patients from the Veterans Affairs (VA) system. In the SEER data, the overall median survival time for non-Hispanic black patients was 57 months, and for non-Hispanic white patients was 72 months, with a risk ratio of 1.14. In the VA cohort, the corresponding median survival times were 65 months and 69 months, with a risk ratio of 1.02; this difference was not statistically significant. The difference in the VA system was smaller, consistent with the consistency of medical accessibility as a factor for racial differences. However, this comparison did not fully distinguish the reasons for the differences between the different systems.

Disability-related barriers deserve special attention. The Austrian caregiver study pointed out that patients had problems such as communication needs, reliance on daily routines, coexisting diseases, limited health education, and difficulties in the clinical environment [9]. Even with screening services provided, patients with developmental disabilities (IDD) may still feel inconvenient. Caregivers may also need clearer information and support. This belongs to a different accessibility

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issue from the problem of distance to professional centers, although both may lead to individuals being unable to access medical services.

This section's research covers different stages of medical care and different healthcare systems. The study identified some possible barriers, but failed to integrate these factors into a unified explanation of accessibility inequality. In cases where specific problems arise, distance, referral, communication, and service design need to be addressed separately.

3.3. Effects of resource gaps on patients

The resource gap is associated with multiple outcomes. One of these outcomes is the use of treatment. The Vietnamese study linked support measures with hospitalization and chemotherapy usage, while the British review explored differences in diagnostic intervals and treatment methods [2, 7]. The research on medical insurance in US mainly focuses on CRS/HIPEC surgeries [6]. These are important, but hospital visits, early diagnosis, and access to treatments do not show medical quality the best.

Patients experience impact in homes also matters. ColoCare research states that young survivors' difficulties in economic is even better [10]. Ajmera et al. found an association between social restrictions and life satisfaction, and social restrictions were also associated with depressive symptoms in the male population [3]. These findings cover different aspects of well-being. Both studies did not indicate that these results were solely caused by economic problems or difficult communication, but both helped explain why medical treatment could not meet all the needs of patients.

Lee et al. analyzed data from 655 colorectal cancer survivors, and the weighted estimates showed that 32.6% of the respondents reported poor or average overall health [1]. After adjustment, those who were unmarried, unemployed, and had multiple chronic diseases were more likely to have poor or average health. However, through mediation tests, it was found that the number of positive health behaviors did not explain these associations. This result indicates that both living conditions and health behaviors should be considered simultaneously. But this does not mean that health behaviors are unimportant.

Some needs may persist among survivors, such as economic pressure, work difficulties, and lack of support. Relevant studies have pointed out the areas where patients may need help, but they did not show that specific gaps have the same impact on everyone. Additionally, differences in study design and results limit our conclusions about causality.

3.4. Overlap of resource gaps

Transportation is example of resource inequality. Long distance travel to hospitals can present difficulties. Without the help of outsiders from society, it will be more difficult for them. Research on US medical insurance shows the impact of distance on medical service [6]. Insurance has the same overlap. Edward's research has math pointed out they are related to financial risks [5]. Income loss further affects the situation, and studies on employment have also confirmed this [10, 11]. Clear recommendations can help patients understand the costs, but knowing them does not provide funds paying costs. For patients with intellectual disabilities, communication difficulties may involve service agencies [9]. In cases like that, introducing alone is difficult for the problem. These cases show that form of assistance can help improve situation, but it may not completely solve the problem. The assessment needs to consider how barriers are related to patient's actual life.

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3.5. Patients at high risk and with unmet resource needs

Can look at special case identified as from retrospective studies. These include difficulty in understanding insurance and lack of support resources which should be opportunity to further understand actual situation [2-10]. Age provides background but it is not sufficient to determine what kind of support the patient needs. Working age patients may rely on income, but it is difficult to meet the job requirements [10]. Elderly patients may face challenges, such as complications for medical treatment, it is important to understand the challenges faced by the individual [1, 6].

Marital status is also sort of important. Li et al. found that unmarried individuals have a lower self-assessed health status [1]. Ajmera et al. also pointed out that a number of people still feel restricted when just talking about cancer [3]. Asking who is willing to provide help is more valuable than relying just on marital status. Unemployed patients mainly need economic assistance, they may also need access to help to return to work afterward. This situation is not usually caused by unemployment itself. When checking, it should be based on different situation rather than just replacing actual needs.

4. Towards a comprehensive support model

This study leaves practical problems. This is how nursing team can identify problems in care for patients. Usually could start with early needs assessment. This should include any time of costs, supports and needs related to disability. The purpose is not to just look at problems while replace the same support afterward. Next, for patients who are unsure about their insurance bills, financial counseling may be necessary; patients who cannot pay their bills may also need financial assistance. Transportation services or patient navigation can help with medical care and assist in dealing with the healthcare system. When the main problem is communication or home support, psychological and social support as well as the support of the caregivers would be more appropriate. These are potential solutions to the barriers described in the literature, but the reviewed studies did not determine which service plan is the most effective.

Furthermore, there is a time issue. Patients who receive treatment after diagnosis may lose income later on, or the relatives who initially provided help may become difficult to contact. Financial follow-up studies and findings in support aspects indicate that relevant changes should be continuously monitored during and after treatment [2, 4]. Reassessment helps to make new referrals or adjust the assistance provided. The existing evidence has not set a uniform re-evaluation time interval for all patients.

Follow-up after referral is also valuable. For example, a patient may have received information about assistance, but still face difficulties in obtaining it. Checking whether the person has actually received help can help more accurately identify remaining barriers. This is approach for just narrowing gap between available resources and actual obtained one. In future, should also look at the unmet needs among patients should be getting.

5. Conclusion

CRC patients encounter economic, social and healthcare challenges. Research results of reviews showing these challenges could exist in multiple forms. Work stress, lack of support, and different sort of barriers. With insurance, patients still require more help. The evidence supports assessment of individual's probable support. Might consider early assessment, continuous follow-up is also important. These should be combined with actual patient's problem, such as financial burden. The

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current research has not clearly showed the service combination these methods can improve every single consequences. This paper has limitations. Much evidence is based on cross-sectional studies. Covering different countries populations. One study was based on healthcare providers' words, making it difficult to decide. Long-term follow-up studies can also determine whether evaluation can decrease needs. Currently, it is important to ensures helps actually reach them.

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